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Making Teal Decoys
1974-75 Annual Report

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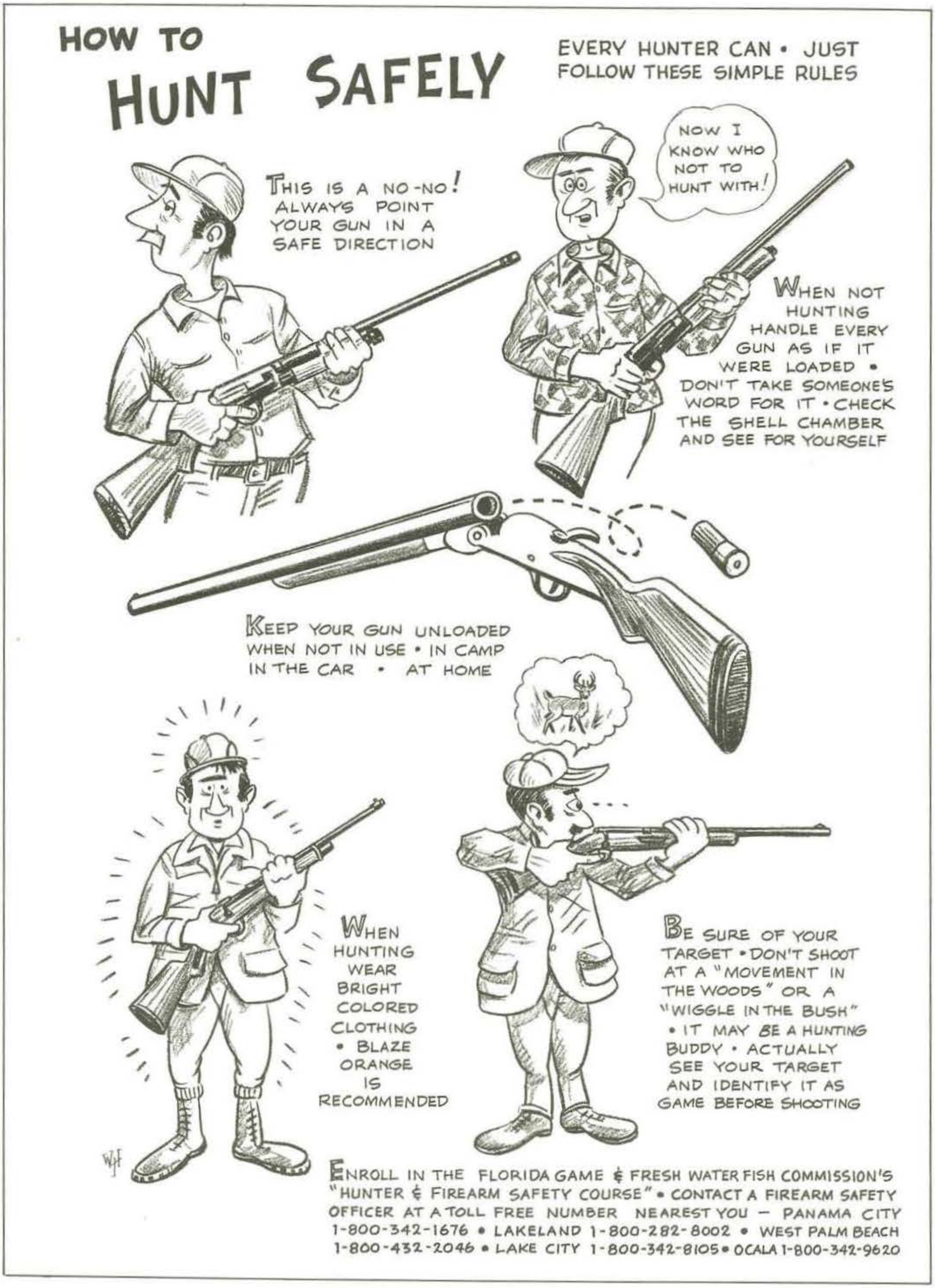

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The Cover

Handsome Green-winged Teal drakes have a spotted breast and green facial markings that extend behind the eye. The duck, or female of the species, is more uniformly gray and white—but with the distinctive green wing patch. See Teal Decoys, page 9.

From A Painting by Wallace Hughes

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Mother Nature has her way—with a little help

Managing St. Vincent's Wildlife

FOR MOST OF ITS RECENT HISTORY—the past 150 years or so—Franklin County's St. Vincent Island has been hardly more accessible to the general public than the steppes of Mongolia. Geographically, it is, at its closest point, not much more than a few hundred yards off the Gulf County mainland at Indian Pass. But until recently, access was barred to all but invited guests of the private landholder. To be sure, there were poachers and other trespassers, some of whom were only seeking to satisfy their curiosity. But generally speaking, as far as most people were concerned, St. Vincent might as well have been in a different world.

In a comprehensive, two-part article in the September and October 1969 issues of *Florida Wildlife*, Editor Gene Smith detailed the history of the 12,000-acre island. His account followed the course of events that began with the naming of St. Vincent by Franciscan friars in the 1630's. It concluded with the acquisition of the island by the U.S. Fish & Wildlife Service in 1968.

Soon after the title to St. Vincent was passed to the Federal agency, the island was opened to limited hunting. Initially restricted to bow and arrow, it was later opened, in addition, to a short session for muzzleloaders (see *Florida Wildlife*, September 1973). The special hunts have not only provided many hours of prime outdoor recreation but helped crop off surplus animals before overbrowsing problems developed.

What the future holds for St. Vincent is a matter of interest to many outdoor-minded Floridians who have in recent years become aware of this unique and interesting bit of the public domain.

The Fish & Wildlife Service has established three primary objectives to guide its activities at St. Vincent. The development of a public-use area that will provide a quality wildlife experience in a natural environment is one. The retention of various biological communities by setting aside protected natural areas is a second. The protection of the habitat required by certain threatened and endangered species is the third.

Charles Noble, who transferred from the Fish & Wildlife Service's Chincoteague area in Virginia, is the refuge manager and supervises all activities on the island. Through a cooperative agreement, the Game and Fresh Water Fish Commission lends a helping hand with some of the wildlife management activities at St. Vincent.

Since the strange and unusual frequently attract more than their share of public attention, there has been considerable interest in the island's exotic animal population. While the property was in private hands, zebra, eland, blackbuck, and sambar deer were to be found there. Today, only the sambar remains in significant number. A blackbuck or two allegedly skulk the thickets, but it's a lonely sojourn for the remnant population—just one or two females. The other exotics were captured and trucked out before the island changed hands. Also eliminated was a small flock of half-tame turkeys —an unknown mixture of wild and domestic strains —removed to clear the field for the introduction of a pure strain wild stock.

Refuge Manager Noble agrees with other wildlife authorities that, in most cases, our wildlands are best given over to the production of native species. In regard to the elklike Asian sambar population of the island, however, he points out, "The sambar utilizes to a considerable degree the extensive marshes with their heavy cover of sawgrass, habitat not much used by the native white-tailed deer. They supplement the whitetails rather than compete with them."

Photos By William Greer

Once much more numerous, a period of extensive poaching during and after World War II put the sambar into a decline. At present, it is estimated that the population stands at between 75 and 100. It is possible that there could be some limited hunting on the species in the future. Perhaps a restricted number of trophy class animals could be taken, to keep the population within the bounds necessary to prevent damage to the food supply. But just when, if ever, a hunt on the sambar will be allowed, is unpredictable.

Another possibility is that some time in the future, sambar live-trapped at St. Vincent could form the nucleus of herds in other areas of suitable but unused habitat.

One prominent feature of St. Vincent is the network of roads that divide most of the island into more or less rectangular segments. These date from the earlier days of private ownership, and apparently were developed primarily as firebreaks. Hardly more than wide sandy trails, even the main ones are traveled but lightly, and then only by vehicles operated by the wildlife men going about their official duties.

For the visitor, the roadways serve as convenient footpaths giving ready access to all parts of the island. They also provide openings in areas of dense cover where hunters can wait out a buck or hog, either as solo still-hunters or as party drive-hunters.

Generally speaking, browse conditions on St. Vincent are good. Careful and continuous watch must be kept on the situation, however. The cur-

(*Continued on next page*)

By MORRIS SHAW

St. Vincent whitetail, far left, eyes photographer from a roadside clearing. The annual harvest rate of around 90 animals appears to be holding herd at correct level for available forage. On inspection tour of island, above, GFC Wildlife Chief Fred Stanberry and Deputy Director H. E. Wallace, Game & Fresh Water Fish Commission, talk with refuge boss Charles Noble, of U.S. Fish & Wildlife Service. Freshwater fishing, at right, is one of many attractions to be found on St. Vincent.

(Continued from preceding page)

rent rate of harvest of whitetail deer is about 90 animals a year. This appears to be adequate at the present population level, but as the herd builds up, additional cropping may be called for.

The annals of wildlife management in this country are replete with examples of efforts in building game populations that were so successful that the available food supply became depleted as the herd grew. Under such circumstances, the carrying capacity of the range is drastically reduced and the game population drops to a low level in the wake of malnutrition and related ills. Years may be required to restore the level of food plant production sufficient to again carry a satisfactory big game herd.

Dense thickets of palmetto and other coarse vegetation are a common feature of considerable amounts of the St. Vincent habitat. There are some 4,800 acres of land that appear suitable for improvement by controlled burning, according to Refuge Manager Noble. Ideally, this acreage would be burned on a 3-year rotation at the rate of 1,600 acres a year. It may not be possible to maintain such a schedule, because the season, humidity, wind, and other factors must be right within rather narrow limits to obtain a successful burn, and these conditions don't always occur at the proper time. Some initial burning has been done with encouraging results, however.

Supplemental planting of various food-producing plants is a widely-applied wildlife management technique, and an effort has been made in this direction on the island. The roadway network offers an opportunity for developing food plots with a minimum of effort and expense. Experimental plantings of Pensacola bahia in the roadways have done well and are being utilized by a variety of island wildlife.

An experimental planting of chufa, a grasslike sedge that produces edible tubers, has been made. The initial planting was primarily for the benefit of the growing population of wild turkeys. So fond of chufas are hogs, of which St. Vincent has a sizable population, that it was necessary to fence in the experimental planting.

Maintenance of most of the island habitat in its natural state, along with the developments mentioned, make this an attractive area for a great many wildlife species in addition to those of primary interest to hunters. Included are such threatened and endangered species as the alligator, osprey, bald eagle, and the sea turtles.

No particular effort has as yet been devoted to increasing the attractiveness of the area to waterfowl, although the lakes host some numbers of the usual wintering birds. Small songbirds, waders, pond birds, and species which find the Gulf and bayside beaches and marshes to their liking, are found in seasonal abundance.

Photo By William Greer

Fish & Wildlife Service Refuge Manager Charles Noble, left, and G&FWFC Biologist Jimmie McDaniel examine a planting of bahia grass in one of the island's seldom-traveled roadways.

In further regard to one endangered species, the sea-going loggerhead turtle, the beaches of St. Vincent offer one of the few places in this part of the Gulf where the female can deposit her eggs with minimum interference. Hogs and raccoons, both abundant on the island, are predators on turtle nests. Noble and his crew have had some success in protecting incubating eggs by fencing them in with mesh wire.

Freshwater fishing attracts a number of knowing anglers to St. Vincent, especially during the spring. Substantial catches of bass and bream are common. Thus far, management efforts have been confined to maintenance of water levels on the fishing lakes located in the southeastern part of the island. Although somewhat difficult of access, during the peak of the spring season there is a reasonable amount of fishing pressure exerted on the area's waters. There is as yet no indication, however, that the current level of harvest is having other than a beneficial effect on the fish population.

This, then, is the approach being taken in managing the St. Vincent Refuge. It involves relatively minor manipulations of the habitat and a watchful eye on what is going on. It's pretty much Ma Nature's show on the big island, and that's a good part of the charm of St. Vincent. ●

Angler Amblings

here's a potpourri of timely thoughts ranging from rubber boats and straightened hooks to alligators' dirty looks—read on

By CHARLES WATERMAN

EVERYBODY KNOWS IT'S HARD to outfish an expert in his home waters, and one of the reasons is the unmarked hotspot that looks just like the rest of the place. You can talk learnedly about structure, water temperatures, depth, and run-ins, but there are some good places which are that way for reasons known only to fish.

Such places can be temporary or permanent. I know some that have held more than their share of fish for 20 years. There's a weedy little lake near my home, all of about the same depth and with about the same stand of dollar bonnets and bigger ones over most of it. There's one area of about 50 square feet that has produced almost as many bass for me as the rest of the lake put together, and try as I will I can't see that it's any different from a hundred other locations. Its pretty well out from shore and not far from a boat trail.

I was on the lake during a really sour evening. I worked it hard for 2 hours in the best part of the late afternoon and had nary a strike—not even a supercilious swirl—near my lures. Before leaving, I tried the hotspot, which I'd saved until last. I flipped a hair bug into the place, shook it a couple of times, and watched a 4-pound bass smack it. Similar events have occurred too often to be accidental.

I went to a strange lake the other day, following the directions of a fishing friend. He told me the best spot was near a piece of fence that stopped at the water's edge. I assumed that something about the fence itself caused the water to be productive, but when I got to the lake, which was several miles around, I saw the shore near the fence was just like the shore elsewhere, except that I caught a couple of bass there and nothing anywhere else. My friend said it had been that way for a long time.

There is a little piece of shoreline down in the Ten Thousand Islands that has been serving up big snook to me, and to my friends, for the past 20 years. No more or less tidal current, no deeper or shallower water, no larger or smaller trees. But there are snook.

Most such places are taken for granted by those who have fished them for a long time. They've just quit wondering why the fish are there.

IN BETWEEN RUBBER DUCKS and real boats there is an array of plastic inflatables that will keep people afloat if not dry. They were designed as pleasant playthings for swimming areas, are quite inexpensive, and can be bought in department and sporting goods stores. Some are in the form of life rafts with oarlocks; others have the general outline of canoes.

Possibly because of sales enthusiasm and partly because people look for bargains, many of these gadgets get into situations where they don't belong. It can be only a short drift from a secure bathing beach to tricky water, and those who set forth in those inflated softies sometimes exhibit a combination of stupidity and daring.

Twice in the past year, I have been a little shaken by experiences with these things. The first occurred when I came upon one about 6 feet long and equipped with oars bobbing along well offshore in a bay with a swimming beach. The boat was empty but there was a dot on the water between it

(Continued on next page)

A good bass that took a hair bug on a mysterious "hotspot" that looked like the rest of the lake!

(*Continued from preceding page*)

and shore. The owner, a grade schooler, was trying to swim out far enough to retrieve it but there was a breeze and he was losing the race. We towed it in to him.

On another occasion, just as we turned into a strong tidal narrows in the Keys, a man and a woman appeared in a little plastic boat (obviously underinflated) from calm water and were immediately out of control in the heavy current. They were dressed more for shopping than swimming and appeared scared stiff when the thing capsized. However, they could reach bottom and made it to shore.

So what does this have to do with fishing? Well, in the first place, there's a big price and quality distinction between buoyant playthings and real boats. Good inflatables are expensive. Don't waste fishing money on beach toys. For another thing, such craft should be given a wide berth by boaters, as they may flip over easily. When you meet one in a narrow place, treat it like a canoe—only more so.

* * *

I HAVE HAD INQUIRIES as to whether it is worthwhile for fishermen to scatter fish food in their favorite fresh waters. Well, chumming is considered an honorable way of attracting fish to a given area, and it certainly works on bass as well as panfish and catfish where currents are favorable.

However, I'm told by the biologists that, except in very small and completely controlled ponds, the introduction of fish food probably won't increase the overall population.

* * *

WRITERS ARE ALWAYS BRAGGING about how their fishing books sell, so it may be interesting for me to tell you about a real turkey. I have written several books about hunting and fishing, most of which were at least worthwhile financially, even if not literary masterpieces of the age. Since a few copies of my other books have sold from time to time, I am not embarrassed to relate the fate of the most informational one I ever did.

It is (was) *Modern Fresh and Salt Water Fly Fishing* and it's now out of print at an early age, although there are some paperbacks of it around. Not that I'm the world's greatest authority on fly fishing, but I know quite a bit about it and I sure covered the field. The thing was the most complete fly-fishing text ever written, fat and full of pictures. I got better reviews on it than on any book I'd ever typed.

The joke (on me) is that it contained information fly fishermen could really use. Instead, they preferred to buy far-out works on entomology and cozy tales devoted entirely to eastern trout fishermen. So old Waterbucket's book was a near washout, barely paying for the time spent on it.

I'd like to find someone to blame, but I can't. In collaboration with friends in bookstores, I spied on persons perusing the outdoor shelves. Not only did they fail to open the fly fishing book; they even failed to pick it up. To show this is not entirely sour grapes, the same browsers who invariably ignored my fly fishing book were likely to pick up something else I had written.

Anyway, may *Modern Fresh & Salt Water Fly Fishing* (the most useful book I ever wrote) rest in peace.

* * *

I'VE BEEN A LITTLE SKEPTICAL of fish that "straighten out the hook" and am generally inclined to believe the fisherman has been using too much force with too much line. But when an expert fishing friend of mine came up with three straightened hooks a while back and had been using 12-pound material, I decided to run a peasant version of a scientific test, rigging some scales to the hooks and bending them slowly. Two brands of Number Four hooks straightened with a pull of less than 6 pounds. However, remember that this pull was directly from the hook's eye to the point. It's seldom you'll get exactly that angle in playing a fish.

* * *

IT WOULD APPEAR THAT CANOES were especially built as cartoppers, although I doubt if the original Indian builders were looking that far ahead. The boats are so light, and go on so easily because of their length, that there's a tendency to use flimsy lashings in spite of the canoe's vulnerability to wind.

It is disturbing to be rounding a turn with the long snout of your canoe sticking out over your head and then have it suddenly hop 3 feet sidewise as the wind catches it from a new angle. You need some fastenings in addition to those at the bow and stern, for a canoe is a rather slippery proposition. I like to tie one of the thwarts to the carrier rack if it's to be a long trip. Most canoes being cartopped move considerably in the wind, which is hard on ropes, straps or shock cords. You should check them frequently. A soaring canoe on its own is a traumatic experience to any driver following you on the highway, even if it doesn't hit him.

* * *

A LITTLE ADDITION TO WHAT I SAID last month about bonefish. Since then, I've made some more trips, talked to more fishermen, and have concluded that the fish are just as plentiful on certain flats as they were many years ago. I'm the first to admit that some flats have been completely destroyed by development. Perhaps the overall population is down.

I do believe fishing success is higher, especially in fly fishing. It's a matter of more thought going

A bonefisherman and his companion, with net, try to capture a big fish on a Keys flat. Note the muddy area that has been stirred up by the fish and its pursuers.

into the flies, and the better anglers are very careful to have each fly properly weighted for the depth it is to work—which may range from 2 feet to only 5 inches or so. When I started bonefishing, I'd just tie on a pink imitation shrimp and flail away. If the water was too shallow, I'd hank it up. If it was too deep, the fish would never notice my goody.

Then too, there are a great many current flies tied with the hook riding up instead of down. Saves plenty of hangups. In fact, I can't see any reason for any bonefish fly with the barb riding down in the water.

Incidentally, although it may be pure coincidence, I have hooked a larger percentage of big fish this year than ever before.

FIBER GLASS IS USED to varying degrees in the construction of graphite rods, leading to a rumor that a stick containing some of the older material is of inferior quality. Not necessarily. It's simply a matter of endeavoring to add some of the good qualities of glass to those of graphite. Graphite, which understandably got its big start in flyrods, is moving more and more into other kinds of fishing. The prices are still high.

ALLIGATOR ATTACKS ON HUMANS seem to have increased lately. The logical explanation is that there are more of both alligators and people. Familiarity with humans can cause gators to lose their natural fear, and half-tame animals are accepted as the most dangerous kind.

But evidently there were many more gators a hundred years ago when the first true sport fishermen were beginning to probe around Florida. Most of them were healthily afraid of alligators, but there were adventurous souls who occasionally captured them by one means or another. I've read some accounts, possibly a little colored by imagination, of alligator attacks upon wading men. From the sound of it, I got the impression that if you get enough big alligators in one pool, one of them is likely to be cranky now and then, whether he's hungry or not. Those were gators that had never seen a man so far as the story tellers knew.

This should be very helpful information if you decide to go fishing a hundred years ago. ●

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adding a few greenwing blocks to
your set can yield a bonus

Teal Decoys a la Brewer

By MORRIE NAGGIAR

HENRY BREWER

Photo By Wallace Hughes

ONE OF THE TREASURED MEMORIES of my misspent youth is centered around the woodshed that sat out back of the house. There one year during the days at the tag end of summer, a couple of cohorts and I spent a good many hours of happy anticipation, hacking out from blocks of wood a collection of duck and goose decoys. For tools we had a camp axe, rasp, and our pocketknives.

The results were crude by present-day standards, I'm sure. But if the birds noticed our lack of decoy-making finesse, we couldn't tell it. As many fowl swung in to look over our blocks as we could manage to buy shells to shoot at anyway. The point is, if such tyro outdoorsmen can turn out a set of successful hunting decoys, you certainly should be able to do the same, especially with a helping word or two from an experienced hand.

The old wooden decoys that were chopped and carved out to aid the hopeful wildfowler of yesteryear have come up in the world. Nowadays, instead of being merely utilitarian parts of a hunter's gear, they have become prized objects of folk art—bits of Americana—often with a price tag that would astound their creators.

One present-day hunter-craftsman, Henry Brewer, of Tallahassee, has found in the revival of the art of decoy carving a satisfying outlet for his artistic talents. His story was detailed in the September issue of *Florida Wildlife*. In that piece, Henry's winning ways with wood and paintbrush in the display decoy field were emphasized. But Henry is a duck hunter, too. He carves his own gunning decoys, not as detailed as his display birds but still highly effective in bringing ducks into shotgun range.

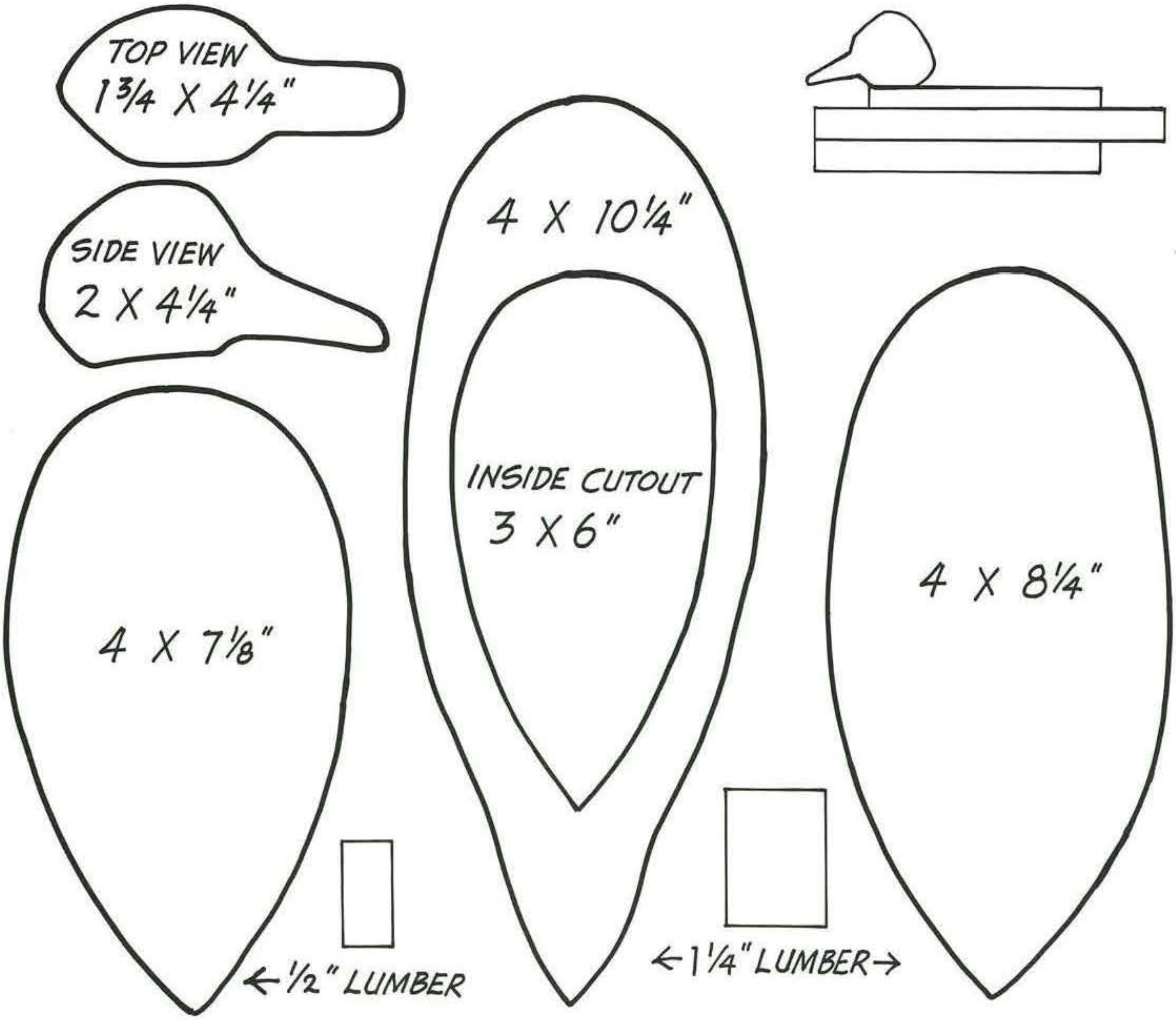
There are a number of reasons why a hunter might choose to make up a set of wooden decoys. They involve such points as aesthetics, durability, superiority of performance, and the joys of a do-it-yourself project. Instead of belaboring the point here, we'll assume the reader is already interested in tackling a decoy-making project.

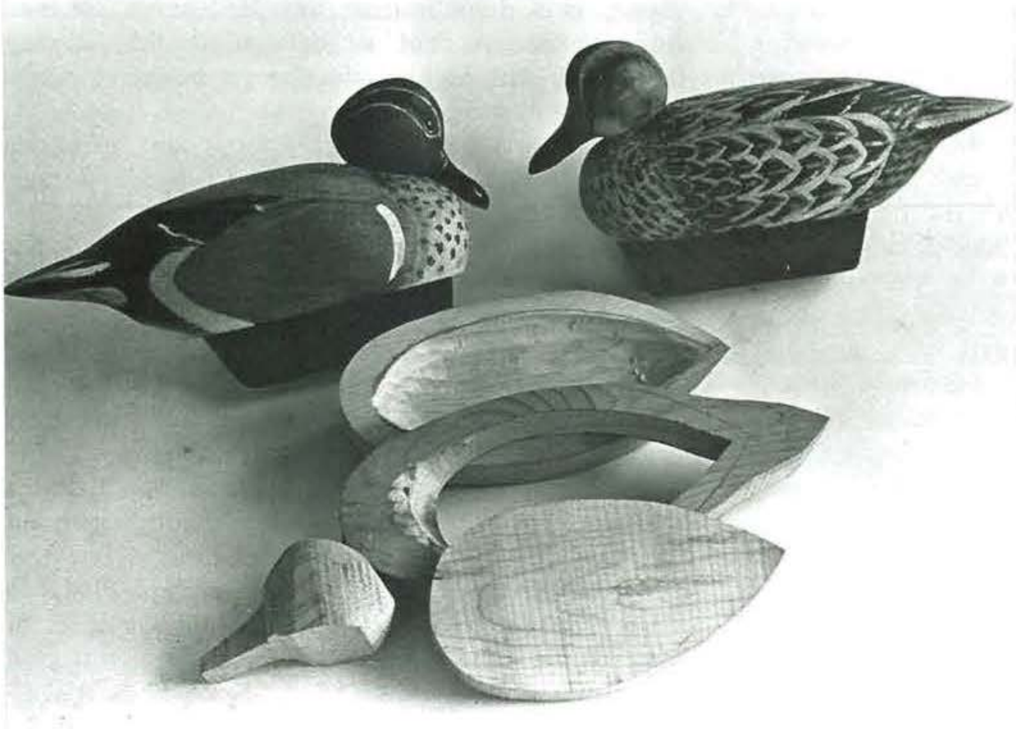
In the considerable collection of gunning blocks I noted on a recent visit to Henry's workshop, a group of green-winged teal decoys caught my eye.

"Teal will often swing by a conventional set of mallard or black duck blocks without displaying too much interest," he explained. "Put a few teal decoys in your set, though, and they are likely to drop right in. In this day of the point system of figuring your daily limit, a 10-point bird will give you a lot more shooting than 25- or 50-pointers."

Carving your own decoys is not an especially

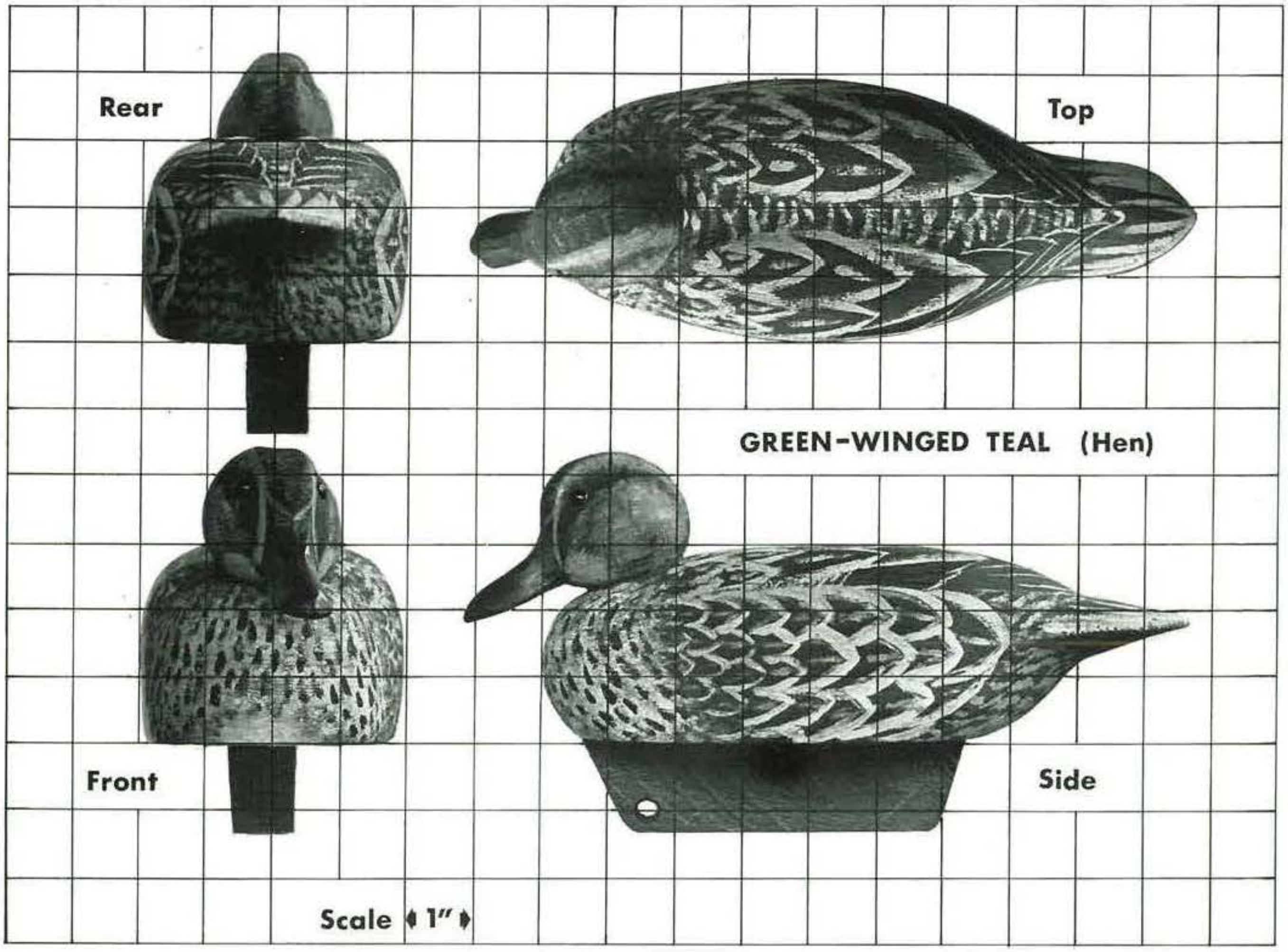
(*Text continued on page 12*)

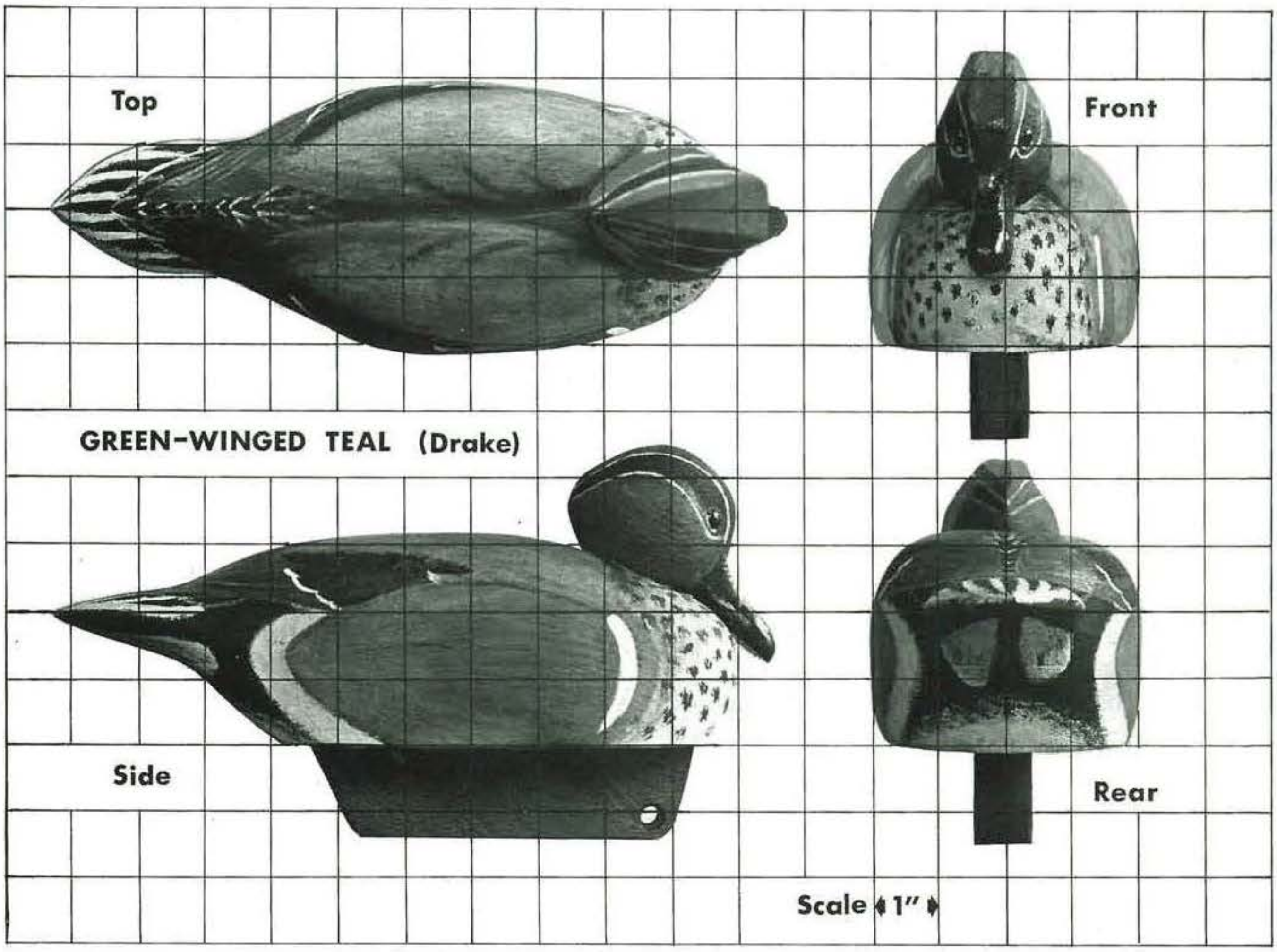




Three pieces of wood are laminated to form a hollow body as shown in illustrations above and at left. To further decrease weight, gouge may be used to scoop out the bottom and top pieces. Most carvers make their own decoy heads, though the machine-carved ones are available from Herter's (address is in the text). Scaled diagram, right, shows plumage pattern of both the drake and hen greenwing teal. See cover painting for a color guide.

Photos By Morrie Naggiar


GREEN-WINGED TEAL (Hen)


GREEN-WINGED TEAL (Drake)

(*Continued from page 9*)

difficult project. At least getting the basic shape of the duck is not beyond the ability of most anyone with some degree of adeptness in the use of simple tools. The painting is something else. But even at that, by carefully following a good color guide, there is no reason why you shouldn't be able to turn out an acceptable hunting decoy.

We have set forth here for the benefit of *Florida Wildlife* readers a step-by-step guide to carving a teal decoy a la Henry Brewer. Following the lead of an expert in the field is a good way to get started. After you gain something of a feel for the craft, you're in a position to branch out with designs of your own.

White pine, western cedar, and cypress are among the good decoy woods that are locally available. Select five-quarter (1½-inch) stock, 4 inches wide and as clear and knot-free as possible for the bottom and middle layers of the three-piece, laminated body. The top piece is cut from ½-inch stock and the head from 1¾ or 2-inch wood. Keels are of 1-inch hardwood.

Now to get under way with the project:

1. Make full-sized templates on cardboard or stiff paper, using the scale drawing of the parts. Cut out the templates and use them as guides to trace the outlines of the parts onto your wood.

2. Cut out the parts. A bandsaw is a handy, time-saving tool for roughing out your decoys. Lacking access to one, however, a jig saw will handle the job. You may even cut out the pieces with a coping saw, which is o.k. for a small-scale production but gets mighty tedious when more than a decoy or two is involved.

3. Use gouge to remove wood from bottom section to depth of about ⅝-inch (see photo illustration). You may also want to take an eighth of an inch or so of wood from inside the top section, to further lighten your decoy.

4. Glue body pieces together and set aside to dry. U.S. Plywood's Resorcinol is a strong, waterproof, and relatively expensive two-part adhesive that gives excellent results. Also good is Weldwood's Plastic Resin, which is considerably cheaper, although it is advertised as water-resistant rather than waterproof.

5. Drill a ⅜-inch hole an inch from the two ends of the hardwood keel strip. Glue a 1-inch piece of hardwood dowel into each, leaving a half-inch protruding. Drill corresponding holes into the bottom of the decoy to accept the keel dowels, and glue keel into position. Allow to dry thoroughly before proceeding.

6. Rough shape the front part of decoy body, using rasp, flat, or the new Sureform shaver, so head will sit at proper angle. The head is attached to the body with a length of ⅜-inch hardwood dowel which is glued into matching holes drilled into body and underside of head. When dry, drill countersunk holes for glass eyes, and glue them into position.

7. Finish shaping body and head. Until recently, Henry used a flat chisel for the final shaping. He now uses the Sureform shaver almost exclusively. A wood rasp will also do the job but is much slower than the other tools mentioned. Detail on head, such as mandible line and nostrils, may be carved with a sharp pocketknife.

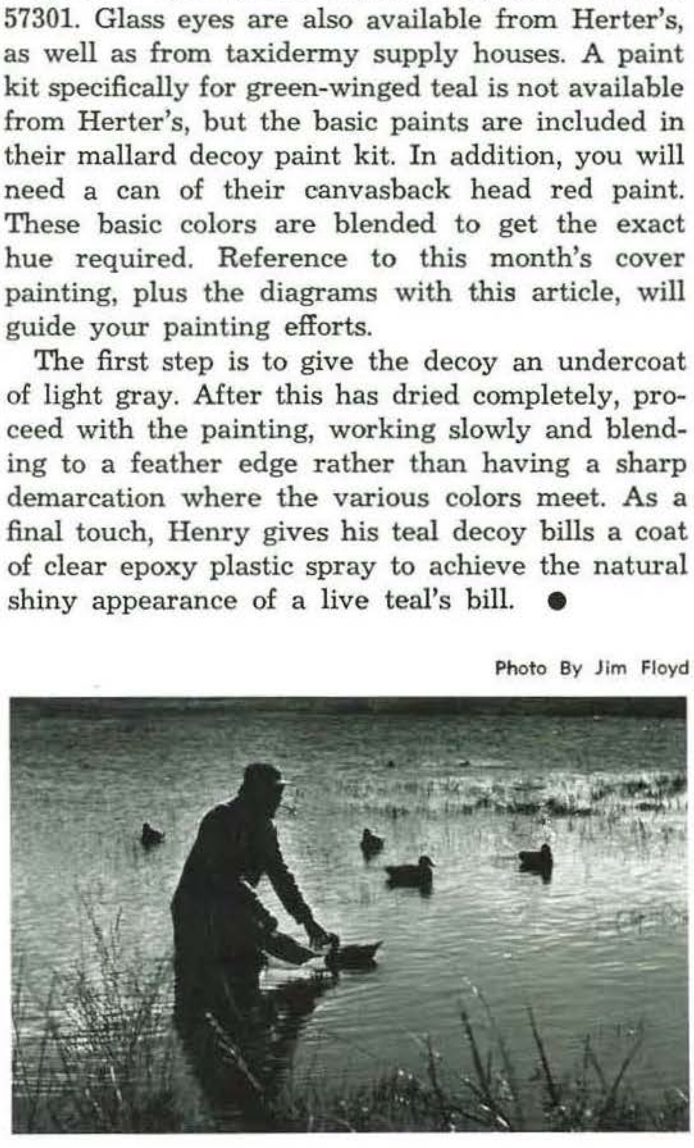
8. Sand decoy. It is best to leave the surface somewhat rough, as it will have less tendency to shine and presents a more natural appearance.

9. Treat decoys with hot, boiled (not raw) linseed oil. Paint it on liberally or dunk the decoys into a container of oil that is near the boiling point. Naturally, extreme caution is indicated in handling the hot oil, to prevent burning yourself or bystanders or setting the oil afire. Wipe off surplus oil and set the decoys aside to dry for a week or so.

10. Paint. Henry uses decoy paint from Herter's, Route 2, Interstate 90, Mitchell, South Dakota 57301. Glass eyes are also available from Herter's, as well as from taxidermy supply houses. A paint kit specifically for green-winged teal is not available from Herter's, but the basic paints are included in their mallard decoy paint kit. In addition, you will need a can of their canvasback head red paint. These basic colors are blended to get the exact hue required. Reference to this month's cover painting, plus the diagrams with this article, will guide your painting efforts.

The first step is to give the decoy an undercoat of light gray. After this has dried completely, proceed with the painting, working slowly and blending to a feather edge rather than having a sharp demarcation where the various colors meet. As a final touch, Henry gives his teal decoy bills a coat of clear epoxy plastic spray to achieve the natural shiny appearance of a live teal's bill. ●

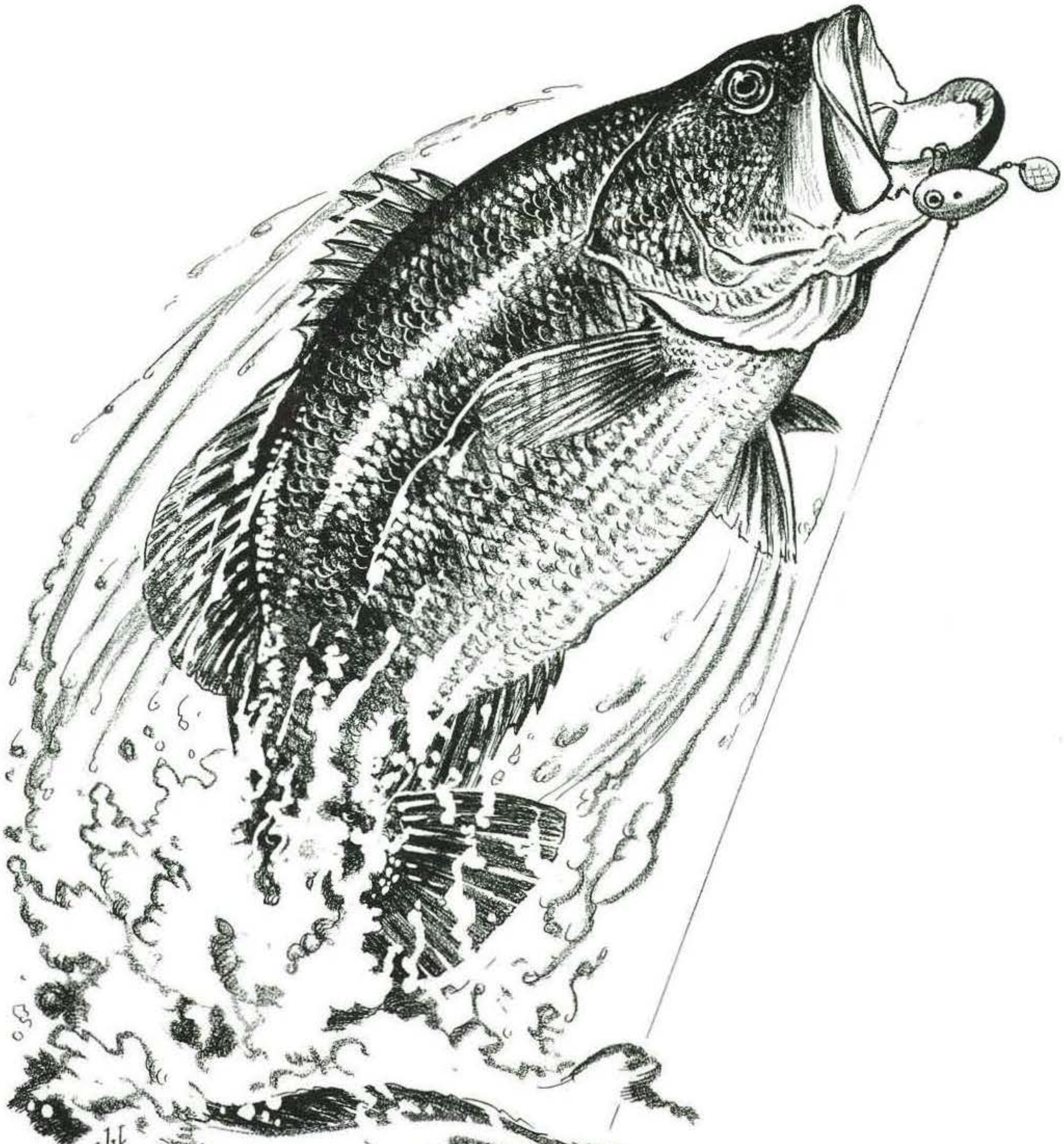
Photo By Jim Floyd



There's something special about shooting over a set of decoys that you have made yourself. Many purists among the waterfowlers feel modern machine-molded decoys are poor substitute for set of hand-crafted wooden blocks.

ANNUAL REPORT

JULY 1, 1974–JUNE 30, 1975



Florida Game and Fresh Water Fish Commission

Financial Statement

July 1, 1973 through June 30, 1974

Statement Of Cash Receipts

Sport Fishing:		$2,714,470.00
AK Fishing	199,289.00	
Fishing	2,515,181.00	
Sport Hunting:		2,678,518.00
AK Hunting	507,283.00	
Hunting	1,080,707.00	
U. S. Permits	3,292.00	
State Hunting Permits	1,028,091.00	
Miscellaneous Permits	59,145.00	
Commercial Fishing:		27,638.00
Retail Fish Dealer	3,570.00	
Non-Resident Retail Fish Dealer	650.00	
Resident Wholesale Fish Dealer	21,250.00	
Non-Resident Wholesale Fish Dealer	1,500.00	
Duplicate Commercial Licenses	5.00	
Fish Pond Licenses	663.00	
Commercial Hunting:		16,243.00
Trapping	1,608.00	
Hunting Preserve	1,775.00	
Guide	350.00	
Game Farm	1,895.00	
Wholesale Fur Dealers & Agents	220.00	
Local Fur Dealers	130.00	
License to Exhibit Poisonous or Venomous Reptiles	435.00	
Field Trial Rentals	850.00	
Wildlife Exhibit or Sale Permit	8,980.00	
Miscellaneous:		1,817,212.00
Miscellaneous Receipts	11,399.00	
Previous Years Licenses Collected	103,607.00	
Magazine Subscriptions	52,812.00	
Sale Old Equipment	302.00	
Confiscated Material & Equipment	6,747.00	
Concession Revenue	10,984.00	
Youth Camp Fees	53,555.00	
Motorboat Revolving Fund Transfer	400,000.00	
Fund Transfer-Hyacinth	989,045.00	
Fund Transfer-Building Trust	188,761.00	
Federal Government:		1,296,917.00
Federal Aid Hyacinth Control	55,777.00	
Dingell-Johnson	288,435.00	
Pittman-Robertson	952,705.00	
Leases:		57,309.00
Webb Area Grazing	11,821.00	
Palm Beach County Easement	10,000.00	
Stump Lease	35,388.00	
Miscellaneous	100.00	
General Revenue:		3,761,632.00
TOTAL REVENUE		$12,369,939.00

Disbursements By Bureaus

Administrative Services		1,476,003.00
Salary	625,505.00	
Other Personal Services	3,539.00	
General Expenses	490,528.00	
Transfer 4% General Revenue	200,298.00	
Operating Capital Outlay	9,764.00	
Debt Service	135,000.00	
Data Processing	11,369.00	
Law Enforcement		4,364,180.00
Salary	3,118,328.00	
Other Personal Services	629.00	
General Expenses	750,279.00	
Operating Capital Outlay	490,246.00	
Data Processing	4,698.00	
Fish Management		1,316,428.00
Salary	887,538.00	
Other Personal Services	12,634.00	
General Expenses	377,892.00	
Operating Capital Outlay	36,617.00	
Data Processing	1,747.00	
Wildlife Management		1,659,530.00
Salary	702,312.00	
Other Personal Services	91,475.00	
General Expenses	648,094.00	
Operating Capital Outlay	43,046.00	
Data Processing	2,209.00	
Lease Payments	172,394.00	
Information and Education		518,467.00
Salary	315,410.00	
Other Personal Services	1,889.00	
General Expenses	177,610.00	
Operating Capital Outlay	19,540.00	
Data Processing	4,018.00	
Aquatic Weed Control		976,919.00
Salary	634,213.00	
Other Personal Services	2,080.00	
General Expenses	332,273.00	
Operating Capital Outlay	8,353.00	
Environmental Protection		148,864.00
Salary	120,357.00	
Other Personal Services	—0—	
General Expenses	25,422.00	
Operating Capital Outlay	3,085.00	
Recreation Development		212,370.00
Salary	136,807.00	
Other Personal Services	4,636.00	
General Expenses	55,683.00	
Operating Capital Outlay	15,244.00	
Youth Camps		52,427.00
Salary	18,754.00	
General Expenses	32,835.00	
Operating Capital Outlay	838.00	
Fixed Capital Outlay		147,312.00
Investments		800,000.00
Certified Forward		553,562.00
Refunds		3,403.00
Transfers		299,914.00
TOTAL		$12,529,379.00

Disbursements By Budget Category

Salary		6,559,224.00
Other Personal Services		116,882.00
General Expenses		3,090,914.00
Operating Capital Outlay		626,733.00
Lease Payments		172,394.00
Data Processing		24,041.00
Debt Service		135,000.00
Certified Forward		553,562.00
Refunds		3,403.00
Transfers		299,914.00
Fixed Capital Outlay		147,312.00
Investments		800,000.00
TOTAL		$12,529,379.00
General Revenue		$3,867,573.00
Operating Expense	3,760,789.00	
Capital Projects	106,784.00	
Trust Funds		8,661,809.00
Operating Expense	8,621,279.00	
Capital Projects	40,530.00	
TOTAL		$12,529,382.00

Commission Membership

1974-75

O. L. PEACOCK, JR., Ft. Pierce	**Appointed January 4, 1971** **Resigned November 30, 1974**
HOWARD ODOM, Marianna	**Appointed January 10, 1972**
OGDEN M. PHIPPS, Miami	**Appointed January 18, 1973** **Reappointed January 5, 1975**
E. P. BURNETT, Tampa	**Appointed January 17, 1973**
RANDOLPH R. THOMAS, Jacksonville	**Appointed January 22, 1974**
DONALD G. RHODES, West Eau Gallie	**Appointed December 12, 1974**

Administration

FOR THE FIRST THIRTY YEARS after the Florida Game and Fresh Water Fish Commission became a constitutional agency, on January 1, 1943, it carried out its programs with revenue derived from the sale of hunting and fishing licenses. During the early years of the Commission, this was appropriate, as the programs of the agency were primarily directed to benefit hunters and fishermen. However, over the years, particularly during the past decade, the Commission has become increasingly involved in matters affecting and benefiting not only the hunter and fisherman but the general citizenry: protection, research and management of nongame species of wildlife; boating safety, civil emergencies and other general police actions; environmental protection encompassing water quality, pollution control, and ecological systems; and development of a recreational program for the Everglades.

Realizing that these activities benefited the general public rather than exclusively hunters and fishermen, the 1973 Legislature appropriated $2,036,737 in general revenue funds to assist in the Commission's overall program. Subsequently, the 1974 Legislature appropriated $5,196,711 in general revenue funds to carry out the expanded responsibilities of the Commission. These funds have been put to good use, as can be ascertained by a review of the various programs and accomplishments set forth in this report.

In general, the Commission accelerated its management of the state's wildlife and fresh water fisheries resources to insure optimum wildlife and fish populations for the recreational and aesthetic benefit of the public. Such management encompassed the promulgation of codes and regulations for the protection of the resource; enforcement of these codes and regulations and those provided by Florida statutes; habitat improvement; research directed toward solving resource problems; regulation and inspection of wildlife importation; regulation and inspection of wildlife exhibitors; control of aquatic vegetation; biological inspection and reporting of construction and development projects which could affect fish and wildlife resources and their habitat; acquisition and development of public recreation areas; and a conservation information and education program.

Of major importance during the past year was the passage of a constitutional amendment which was submitted to the public during the general elections held in November 1974. The Commission supported and endorsed this amendment which placed its operations more in harmony with those of other state agencies in such areas as planning, budgeting, purchasing, and personnel management. At the same time, the Commission retained its constitutional autonomy. In fact, its authority is more specifically denoted, since its powers are defined as "regulatory and executive" rather than "non-judicial".

The Commission appreciates the support of the Legislature, the sportsmen, and other outdoor-oriented citizens of the state, and intends to justify that support.

Administrative Services

WHEN THE REORGANIZATION OF Commission administrative operations went into effect in September, an enormous work load indicated the need for a Division of Administrative Services. The following comments show that the staff was equal to the challenge, and that with the help of all Commission personnel, the agency ended the 1974-75 fiscal year with its bills paid, the land acquisition funds properly invested, and a balance of about $300,000.

Publications Section had a productive year, with the initiation of equipment acquisitions that should improve the quality and speed with which duplicating can be delivered. An in-depth study of in-house printing revealed a need for more Commission output capability in order to save time and reduce the amount of outside services required, particularly typesetting. The section handled 54 printing jobs during the fiscal year. The addressograph operator produced a total of 98,749 address impressions for the various bureau mailouts.

Florida Wildlife magazine subscription income topped $53,000 for the year, an increase of 13% over 1973-74 and 17% over 1972-73. The good closing figure was attributed to an unprecedented $8,000 gift subscription and renewal business in December 1974, which more than doubled the previous December's subscription income.

Twelve issues of the magazine were produced and mailed during the year, at a total circulation of approximately 21,000 copies monthly and an annual readership approaching three-quarters of a million people. With improved mailing services and planned subscription promotion, the paid circulation can be expected to increase in 1975-76.

The Planning and Budgeting Coordinator worked very closely this year with the new Director of Administrative Services, assisting him with the implementation of the new Departmental Accounting System and other projects and modifications designed to effect greater operational efficiency and control. The Coordinator supervised the preparation of the Operational and Fixed Capital Budget requests and assisted bureaus with budget allocations and special problems. In addition to his routine duties, he was given the assignment of coordinating all Commission fixed capital outlay projects. In all, 25 active projects were managed during the fiscal year.

The coordinator spent approximately one month as the acting Purchasing Agent. He also attended Departmental Planning meetings and meetings of the Capitol Center Planning Commission as the Departmental Planning Officer.

This position has undergone a period of evolution resulting in a number of significant functional realignments and the assignment of additional duties that should contribute greatly to the achievement of the Commission's goals.

During the past year, Personnel's operations included processing applications, leave and pay records, performance ratings, and preparing and publishing the Commission's rules and regulations. The more restrictive wage-hour law provisions necessitated a more detailed system for keeping leave records and caused the adoption of a computer personnel data system. The requirements of the Administrative Procedures Act have necessitated much more paper work for the adoption of rules and regulations. During this year, the management area regulations, resident and migratory hunting seasons regulations, the Wildlife Code, and 53 rules were drafted, published, and filed in the office of the Secretary of State.

The 1974-75 fiscal year began a new era in Communications for the Commission. Funding was obtained to operate a 24-hour dispatch radio system, with intercommunication with other law enforcement agencies and toll-free public access by telephone as well as after-hours telephone access to the Commission.

The challenge was tremendous. The old radio system employed 17 radio operators, so 40 additional operators were employed and trained, equipment was modified to accommodate the new operating concept, and an operational manual was written.

Communications personnel, with the assistance of the Law Enforcement Division, met the challenge. The system was operational on the target date of September 1, 1974.

(Continued on next page)

(Continued from preceding page)

After the system was in operation a short time, additional needs were discovered—for equipment improvement, procedure change, and greater operator proficiency. Some equipment modification plans were made, and a great deal remains to be done.

Approval was obtained to plan a comprehensive Operator Training Program that, when finalized and implemented, will place the Commission's radio operators in the ranks of the most proficient in the country.

Aside from a tremendously improved safety factor afforded to the Commission wildlife officer, the improved communication system has resulted in numerous arrests attributed to concerned citizens being afforded a method of access to the Commission to report wildlife violations while they were in progress. As the toll-free phone numbers become more widely publicized, the number of arrests will undoubtedly increase, resulting in even greater protection of our valuable wildlife.

The Property Office spent a large amount of time on statewide equipment checks. Computer listings were updated so that information about Commission property could be obtained quickly. Annual inspection will be a standard part of property operations in the future, with a 6-month follow-up of a listing of each employee's assigned equipment. In this manner, each person can check his own equipment with the property records.

Procedures and a file for lost, stolen, and destroyed equipment have been established, to afford a greater accountability in this area. The stock room was straightened, small items were inventoried, and the clothing was sorted, sized, and folded. Confiscated items were sold, and surplus property was sold or destroyed if necessary.

Property Office personnel are continuously updating the property records and helping to get the men in the field any equipment, uniforms, tags or other items they need.

The 1974-75 fiscal year brought about many changes in the Finance and Accounting Section. During the first quarter the Finance and Accounting Director attended many meetings relating to the installation of the Departmental Accounting System, as recommended by the Auditor General's Office. The Commission operated under the old accounting system, so all entries for the 1973-74 fiscal year and opening entries for 1974-75 were entered in the old system. On October 1, 1974, the new DAS system was installed, and all financial and accounting records were coded into the new accounting system.

Great strides were made during the second quarter of the fiscal year, putting into use the new DAS system. On December 12, 1974, we had our first year-to-date accounting reports, furnishing up-to-date information on revenues, expenditures, and outstanding commitments for each cost center, section, and division. All effort was made to clear old outstanding invoices and prepare for the new 30-day payment law. While improving and perfecting the new system, the Finance and Accounting Section rearranged work procedures and systems to insure compliance with the new law.

Requests for reimbursement under all Federal Projects were submitted through the end of the third quarter. During this quarter the Finance and Accounting Director attended the tax collectors' meeting and a meeting with personnel of the Office of the Comptroller with reference to the 30-day law. Section personnel completed the allocation to tax collectors of all sport licenses as well as wildlife management area stamps. This information was furnished to the printer, and all licenses and stamps were mailed to reach the tax collectors prior to June 1, 1975. A system was set up whereby all outstanding purchase orders 6 months old or older would be checked and the vendor contacted in order to clear all encumbrances as soon as possible.

The last quarter of the year found the Fiscal Section concentrating on keeping costs up-to-date so that expenditures could fit within the budgetary and cash limits of the Commission. Special efforts were being made to further develop the Departmental Accounting System so that it will be more efficient and supportive in the next fiscal year.

After conferring with the various divisions of the Commission, several of the cost centers were changed. This change was by mutual agreement in order that a better cost picture might be presented, allowing the divisions to utilize the report and management practices.

This past year was one of change. Captain Von Walker retired, Dick Trout began the reorganization of the purchasing procedures in the 5 months he was in this position, and Bill DeWert joined the Commission as Purchasing Agent on March 10 and completed the purchase order system. Purchasing has proceeded with plans to process all requisitions with a 2-day turnaround time element. All invoices and purchase orders are being encumbered on a daily receipt basis. The past delays in payment of outstanding invoices no longer exist. All processing for payment is completed on the date of receipt of invoices from vendors. At the close of the report period, Purchasing was proceeding with the makeup of vendor files for all commodities which would include an up-to-date price list. With the large volume of printing required by the Commission, they were also planning to prepare a printing file, with types of printing included for handy reference. This file would also include a list of typesetters.

A considerable amount of time was spent with the auditors, explaining our present purchasing procedures and assisting with information so that a flow chart could be prepared for better understanding of the Department. The time spent was of benefit also to Purchasing, to better understand just what was expected by the auditors. It is felt that the section is well on its way to complying with all the auditor's requirements.

Fish Management

IF THE HISTORY OF FISHING in Florida is ever written, Fiscal Year 1974-75 will undoubtedly go down as the year of innovation. Many new projects were launched, but, for the most part, their benefits will not be fully realized for some time.

The snook was successfully spawned, and perhaps with another year's experience it will be possible to place enough of this saltwater predator in fresh water to evaluate its performance. This year, 750,000 were spawned, but none lived longer than 14 days.

The hybrid obtained by crossing the female white bass with the male striped bass was appropriately named the "sunshine bass," and it has already become a favorite of anglers. Some fish camps report more of these fish being caught than largemouth bass.

Lakes in which sunshine bass have been stocked include Lake Victor in the Northwest Region; Cherry Lake, Watertown Lake, Alligator Lake, Ocean Pond, Lake Butler, and Lake Powell in the Northeast Region; Cow Pen and Broward Lake in the Central Region; Lake

Proof of the pudding. The objective of fisheries management efforts is to provide fish for Florida anglers. Here, field man checks a string of bream during creel census—a technique which is commonly used to measure success of fisheries programs around the state.

Photo By William Greer

Parker, Lake Bonny, Lake Morton, Saddle Creek Park, Scott Lake, Crystal Lake, and East Winter Haven Chain in South Florida Region; and Lake Osborne, Lake Ida, and Lake Catherine in the Everglades Region.

Lake Okeechobee has been the object of intensive research for several years, and from this research has come a bold new plan designed to allow a much greater harvest of fish. It has been determined that most of the fish in Lake Okeechobee probably never see a hook and to make use of this population, it is proposed that nets be used to harvest part of the surplus. This would not only remove nutrients but also create a void whereby the remaining fish should grow and reproduce more rapidly.

The grass carp, or white amur, proved that it would indeed eat large quantities of aquatic vegetation. What else will it do? We don't know—so research was begun to find out. So far, no conclusions have been reached.

Water fluctuation is nature's way of maintaining bodies of water so that fish and vegetation stay more or less in a dynamic situation. In several dramatic demonstrations, fisheries biologists have duplicated nature with the results noted in increased catches.

Drawdown structures are under construction on Lake Iamonia and Newnan's Lake, with Lake Carlton scheduled for early spring. These lakes are in different stages of aging, and the purpose of a drawdown is different on each lake. One thing is sure: Drawdowns stimulate sport fishing, both during and after.

Under a recent ruling by the Commission, bass tournament operators must now have a permit. There existed the possibility that certain bodies of water were becoming crowded with tournaments. All fishing tournaments with over 25 boats, or prize money totaling more than $1,000, or more than 50 entrants, must have a permit.

Some valuable knowledge has already been obtained by Commission biologists using fish caught by tournament fishermen. Tag returns from 828 largemouth bass marked and released in the St. Johns River indicate that during the first 6 months, 144 (or 17%) have been recaught. Bass have been caught as far away as 123 miles from the tagging location.

Fish hatcheries, long ignored, have recently begun to stir. Richloam Hatchery, located about 25 miles north of Lakeland, produced monosex grass carp, hybrid bream, and the usual million plus striped bass and sunshine bass.

The hybrid bream offers a number of possibilities. Hatchery personnel have produced crosses between bluegill-shellcracker, bluegill-warmouth, bluegill-redbreast, shellcracker-spotted sunfish, and several other combinations. The main difficulty in using bluegill in the past has been that they have always reproduced in tremendous numbers and exceeded their food supply, resulting in a stunted population. The hybrid is unable to produce sizable second generation populations, and in research ponds have furnished fishing superior to that of their parent species.

At Blackwater Hatchery, situated near Lake Carr in the Blackwater State Forest, the Commission is in the process of building a new fish housing facility and laboratory, which will greatly increase the potential for productivity at this location.

A new project to be located at the Blackwater facility will look into increasing the productivity of streams in the Panhandle area. Changes in land use policies, coupled with deadhead log removal back in the 40's and 50's, have resulted in a reduction of stream habitat for game fishes. The project will possibly involve introduction of new stream fish, improvement of habitat, and changes in regulations.

The number of lakes sampled by regional fish management personnel is too great to list in this publication, but it is through the efforts of these people that the production of many a favorite fishing spot is maintained. After each sample is taken, an analysis is made, using the best technical know-how, and recommendations are outlined which may include fish attractors, marginal rotenone treatments to reduce excessive fish populations, supplemental bass stocking, or some other tactic designed to improve angling success.

In an effort to recover some of the costs involved, the Commission decided to begin to charge private pond owners for stocking fish in cases where the body of water to be stocked is greater than 20 acres. A lake or pond over 20 acres may still be stocked free of charge upon satisfactory assurance that it will be open for public fishing.

Behind every team that makes the headlines stand those without whom success would have been impossible, and certainly Fisheries is no exception. Long hours in the chemistry labs analyzing pollution samples, a fish kill on Sunday afternoon; follow-up data collections after a drawdown; long nights sitting by a gill net in an effort to catch a spawning striper; weighing and measuring fish killed three days before; picking 500 pounds of gizzard shad out of a 100-yard trammel net—these were only some of the tasks Fisheries people were involved in over the past year.

Aquatic Weed Control

THE COMMISSION'S AQUATIC WEED CONTROL SECTION granted no quarter and received none in its war against the rapidly-growing aquatic plant, water hyacinth.

The unavailability of approved herbicides, coupled with another mild winter, aging equipment, and rapidly-increasing cost of 2,4-D, hampered the effectiveness of field spray crews during the 1974-75 FY.

A shortage of 2,4-D, the growth regulator employed by spray crews to prevent the increase in number of water hyacinths in Florida lakes and streams, caused Director Frye to declare an emergency early in the fall of 1974 to secure supplies of herbicides to keep our airboats and spray plane operating throughout the state.

The 20 airboats purchased in 1972 have been operated approximately 937.3 hours per boat without replacement or major overhaul. The cost to operate and maintain these 3-year-old airboats is expected to increase substantially during the 1975-76 FY.

The increased cost of petroleum products and byproducts has been reflected in the cost of chemicals used in the operations branch of the Weed Control Section. Prices for a gallon of 2,4-D have ranged from a low of $7.15 per gallon to a high of $10.50 per gallon.

Expenditures for Aquatic Weed Control operations in 1974-75, including salaries, expenses, and operating capital outlay for persons and equipment involved in controlling noxious vegetation, were $826,262.70.

The cost to control 1 acre of water hyacinth was determined to be $16.25. The cost to treat other species of noxious aquatic plants ranged from $37.50 to $100.00 per acre, depending on the target species.

Field reports indicate the Aquatic Weed Control Section was able to keep 49,075 acres of the state's waters free from water hyacinth. (See Table I) A total of 667 individual bodies of water were visited and treated by Commission field crews during the past year.

The extension service and permitting activities conducted by the six aquatic botanists located in the five regions of the state continue to increase in number in all areas.

Information received in Tallahassee indicates that an average of 1,500 requests for assistance concerned with aquatic vegetation were received and acted upon by each of the six aquatic botanists during the report period. The approximate number of aquatic weed control permits processed during the same period was 500, which includes permits approved for experimental tests of new herbicides.

The Department of Natural Resources requested that the Florida Game and Fresh Water Fish Commission conduct a survey of noxious aquatic vegetation, with specific emphasis on the number of acres of water hyacinth and hydrilla present in lakes, streams, and rivers considered as intercounty areas. The survey was conducted by various aquatic botanists and aquatic weed control supervisors assigned to five Commission regional offices.

The only water areas included in the survey were water bodies which are bordered by two or more counties. A total of 122 areas were surveyed, and seven different species of noxious aquatic vegetation were listed during the course of the project. An eighth category, listed as miscellaneous, including plants identified as watermilfoil, coontail, pondweed, cattails, and bladderwort, was recorded for the Tsala Apopka portion of the survey.

Problem plants observed during the survey, listed in descending frequency of abundance, are as follows: water hyacinth, hydrilla, eurasian watermilfoil, alligatorweed, cattails, egeria, and water lettuce.

Water hyacinth accounted for 38,284 acres of the total of 85,768 acres, or approximately 45.0%, of the noxious aquatic vegetation recorded during the intercounty survey, which excludes plants located within the individual counties.

We should point out that the total acres of noxious vegetation, especially water hyacinth, will vary depending on climatic conditions, which include temperature, wind direction, wind velocity, and precipitation. The efforts of the 19 spray crews and aquatic weed control spray plane can reduce the number of acres of this floating plant, depending on the time of the survey.

The bulk of the intercounty noxious vegetation survey

Prolific water hyacinth causes a major problem on many waters of Florida. The rising costs of spray materials, equipment maintenance and replacement were among obstacles faced by Aquatic Weed Control Section during the past year.

Game & Fresh Water Fish Commission Photo for 1974 was carried out during the month of July. A second survey of the same areas is proposed to be conducted during the month of August 1975, in order to provide some insight into the spread and/or control of noxious aquatic plants in the specific bodies of water which were included in the 1974 survey.

Investigations into the use of the water hyacinth weevil *Neochetina eichhorniae* for the control of water hyacinth in areas difficult to treat by airboats, have continued during the past fiscal year. Approximately 90 release sites are currently under close surveillance by Game and Fresh Water Fish Commission personnel and employees of cooperating agencies. Preliminary reports received from field personnel indicate that most all release sites have reproduction and that the weevils are beginning to stress the water hyacinth plants.

The Aquatic Weed Control research section, which consists of two biologists, stationed in Eustis, is responsible for determining the effects of various herbicides on bottom organisms. They recently presented five papers at the Hyacinth Control Society meeting held in San Antonio, Texas, reporting their findings during the past year.

The grass carp project, which is a cooperative study being conducted by personnel of the Florida Game and Fresh Water Fish Commission and the Department of Natural Resources was continued during the 1974-75 FY. One Commission fishery biologist, stationed at Lake Wales, Florida, has been responsible for collecting water quality samples and fish population data on the research areas located throughout the state.

TABLE 1. Amount of 2,4-D Applied and Area Treated July 1, 1974—June 30, 1975

	Number Of Gallons 2,4-D	Bodies Of Water	Number Of Acres
July 1974	3,428	79	5,718
August 1974	4,386	79	7,632
September 1974	3,529	69	5,826
October 1974	3,449	68	5,271
November 1974	1,589	52	2,712
December 1974	559	29	1,219
January 1975	1,283	45	2,228
February 1975	801	42	1,744
March 1975	1,227	33	2,231
April 1975	2,533	44	4,084
May 1975	3,816	67	6,405
June 1975	1,894	60	4,006
	28,494	667	49,075

Everglades Recreation

During 1974, the Everglades Project staff was expanded to 14 people. Project positions now include a project leader, recreation planner, secretary, four game managers, and seven wildlife officers. Major activities were planning and designing recreation areas, and conducting wildlife management and habitat improvement projects and a survey of recreational use on the area.

Staff personnel concentrated on seven construction projects for 1974-75. These included two day-use sites in Broward County, expansion and improvements at Everglades Holiday Park in Broward County and Loxahatchee Recreation Area in Palm Beach County, water control structures in the Miami Canal, wildlife islands, and mucking of spoil banks.

The day-use sites in Broward County are located along U.S. #27 at spillway S-11C and 26 Mile Bend. When completed, the twin facilities will include new and improved boat ramps, picnic shelters with tables, trash receptacles, and landscaping. At S-11C an artificial lake has been designed to allow maximum utilization by bank fishermen. The small lake will be stocked through the cooperation of Fish Management personnel. Plans have been completed for these two projects, and construction will begin around September 1, 1975.

Everglades Holiday Park in Broward County will be upgraded and expanded. Improvements include an advanced waste water treatment plant, water treatment plant, new multilane boat ramp, comfort station, and approximately 5 acres of fill with 43 camp sites. An artificial 3-acre lake has been designed to provide for good fishing. Loxahatchee Recreation Area in Palm Beach County will receive potable water via a newly-constructed water main, and sanitary facilities will be expanded. Fifteen additional acres of land immediately adjacent to the concession are being purchased for future camp site development. Plans have also been completed for these two projects, and construction is scheduled for August 1975.

During the year, an agreement was executed between the Central and Southern Florida Flood Control District and the Florida Game and Fresh Water Fish Commission for construction of a water control structure in the Miami Canal. The Everglades Project currently has $192,000 available funds for this structure. In the agreement, the Flood Control District has accepted the responsibility not only of designing this structure but also of operating and maintaining it. The structure, when complete, will help retain water on the north end of Conservation Area #3 and prevent disastrous muck fires that have occurred in recent years.

The construction of 78 wildlife islands was completed in Conservation Area #3B, located in Dade County. The islands are 1/16- and 1/8-acre in size, grouped in different combinations. Early in 1975, 54 wildlife islands were completed in the "Holey Land", a part of the Everglades Wildlife Management Area located in Palm Beach County. After construction, each island was measured and mapped in a continuing study of the utilization by wildlife. Native plants from the Everglades Project nursery have been planted on the islands following construction, to provide maximum wildlife utilization. The addition of these islands will provide a refuge for wildlife during high water periods, a source of water during dry periods, and will create habitat diversity in areas where they are located.

Early in 1975, a spoil bank mucking project was undertaken along the Miami Canal. A contractor was hired to remove muck from the adjacent marsh and place it on lime rock spoil banks along the Miami Canal. Muck was placed in 6- and 9-inch depths over a total of 95,000 square yards. Thirty-two spoil banks were covered in this manner. Following inspection of each island, a seed-planting project was undertaken by staff personnel. To date, over 5,000 pounds of Pensacola bahia grass seed have been manually seeded, along with several hundred pounds of specially formulated fertilizer. The seeding process was followed by planting native vegetation found

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on natural islands in the area. When complete, the once-barren spoil banks will provide refuge in high water for wildlife and forage similar to previously-constructed wildlife islands. The spoil banks are expected to be much more stable than other wildlife islands because the rock foundation will not be susceptible to muck fires.

The Everglades Project staff initiated a 1-year comprehensive recreation survey in 1974 for the Everglades Wildlife Management Area and surrounding areas. The survey, when complete, will reveal for the first time how many people use the area, and what activities are most popular. The data will be used to guide future planning and management in the Everglades area.

Project staff moved ahead on exotic plant control in cooperation with Wildlife Management and Aquatic Weed personnel. The main focus of this effort has been to conduct research on control of melaleuca with herbicides. Test plots in Conservation Area #3A were treated with several types of aquatic herbicides. Successful kills have been recorded with retreatment of seedling trees up to 6 feet tall with chemicals containing Silvex (2-4-5 TP). Different Silvex formulations have yielded results which were 60% to 90% effective. Project personnel participated in a statewide melaleuca workshop where, for the first time, governmental agencies, scholars, and concerned individuals exchanged knowledge on the exotic invader. Plans are under way to establish an intensive herbicide research program in Conservation Area #2B. This program will involve numerous test plots which will be subjected to different chemicals and combinations of chemicals to determine the most effective control formula.

During the 1974-75 hunting season, project personnel assisted Wildlife Management and Law Enforcement personnel by manning check stations. Activities at check stations included gathering morphological data on wildlife, an intensive recreation survey, and checking for violations.

Alligator nesting activity, along with water level monitoring, was documented during the 1974 rainy season. A total of eight alligator nests were inspected biweekly, beginning in July. By September 15th, all nests had been destroyed by high water levels.

Project personnel began a regular maintenance program for the management area signs in the Everglades area. Most of the signs have been painted or replaced. In an agreement between the Seminole Tribe of Florida and the Florida Game and Fresh Water Fish Commission, five entrance signs were made for the Big Cypress Indian Reservation. Signs were designed, manufactured, and installed by project personnel, who also assisted the Wildlife Management Division in maintenance posting and special posting in the Everglades Wildlife Management Area.

As a result of these efforts, recreational use in the Florida Everglades will be better accommodated, and the protection of the habitat and wildlife resources of the area will be enhanced.

Photo By Tom Wayman

Although the area provides outdoor activities for substantial number of people, the project staff has initiated a first-time comprehensive survey of Everglades recreational use to guide the planning for the future.

Wildlife Management

THE 1974 FISCAL YEAR brought to the sportsmen of Florida an additional 51,484 acres of prime hunting area which heretofore had been unavailable. The area known as the Three Lakes Ranch is located in Osceola County in close proximity to the Sunshine State Parkway. It was purchased by the State of Florida in joint cooperation between the Department of Natural Resources and the GFC under the state's Endangered Lands Act. A portion of the area (8,003 acres) will eventually be developed as a state park, and the balance, 43,481 acres will remain in wildlife management area status. The area is rich in wildlife resources (deer, hog, turkey, squirrel, quail and endangered avian species) and provides a valued addition to the state's public hunting areas.

Hunter use on the 39 wildlife management areas continued to increase as sportsmen found more and more hunting lands being restricted for public access. During the 1974 hunting season, 105,000 hunters, representing 40% of all license holders in the state, hunted on wildlife management areas.

The management area system is comprised of two types of hunting areas, designated Type I and Type II. Included in Type I areas are the 120,000 acres owned by the Game Commission, 1,253,184 acres owned by other agencies of state government, 1,671,600 acres of federally-owned lands, and 1,679,729 acres owned by various private companies and individuals. Under Type I management, the GFC provides virtually complete supervision of hunting activities on the land. Boundaries are posted, check stations installed and manned where possible, minimum road maintenance performed, controlled burning and other habitat improvement as well as preparation and planting of food plots accomplished, and enforcement of all local, state, and federal regulations is undertaken. These services provide an inducement to owners of large tracts of wildlands to participate in the management area program, since the owner frequently could not give his land the same degree of protection if it were withheld from public hunting.

In 1974, the Legislature of the State of Florida, realizing the value to the sportsmen of the state of having available the 1,679,729 acres of privately-owned land, made available the sum of $200,000 to be distributed to these landowners. Distribution is made by application of a formula which considers hunter-use (man-days use) and available acreage in each ownership. Twenty-six owners shared in the 1974 distribution of funds.

A new Type II Wildlife Management Area concept was introduced in 1974. Some landowners desire, for obvious public relation reasons, to permit controlled public hunting on their lands, but at the same time they desire to continue private controls over management and maintenance on the land. Too, they may wish to effect specific hunter-use requirements such as no camping, daytime access only, restricted access via specified entrances or roads, or other restrictions pertinent to the type of land and the management practices in effect on the land.

Under Type II areas, the owner may, at his discretion, collect a fee from the hunter for using the area. The owner is responsible for all services on his land other than the usual law enforcement that is provided to the entire state of Florida. No landowner payments are included in Type II areas.

During 1974, there were 319,910 acres under three ownerships open to public hunting access. The Commission hopes this type of cooperative venture will expand in future years and provide additional quality hunting opportunities for the sportsmen.

During the year the Commission continued its efforts to further expand the wildlife management area program by entering into negotiations for new acquisitions and expansion of present holdings. Two areas in the Everglades region of south Florida were actively pursued —the Rotenberger and Holey Lands tracts. Negotiation was also entered to retain the Brown's Farm WMA in future hunting programs.

Archery and primitive weapon hunting was expanded again this year. During the September 7-29 statewide archery season, there were 17 WMA archery hunts, and at later dates there were 13 special archery hunts on 7 WMA's. Six primitive firearms hunts were conducted on five WMA's during 1974, and four special bear hunts were conducted on two management areas.

Sportsmen throughout the state were introduced to the Commission's proposal of establishing a quota hunt system during the statewide public meetings held during the winter months in all regions. The 1973 Commission report carried substantiating documentation for the need to regulate hunting pressures on WMA's during the early part of the season. As a result of favorable public comment and encouragement at the public meetings, the Commission gave approval to our implementation of a quota hunt system on all WMA's for the forthcoming 1975-76 hunting season.

During the last half of the 1974 fiscal year, plans were developed to carry out the program, information was disseminated to the public, application forms were designed and printed, and an accelerated reprogramming of the originally-designed computer program was undertaken—to change from a random selection program to a first-come, first-served operation. This changeover came about at the request of hunters at the public meetings and was acceded to by the Commission. Applications were released to the public on June 2, and by month's end, over 31,000 had been received for processing. A full report of the quota system program will be carried in next year's annual report.

Functioning for the first time in several years with a full complement of overhead personnel, the Division undertook expanded programs for improving wildlife populations and restoring habitat. A plan was designed to provide reconnaissance and mapping of the Big Cypress Fresh Water Preserve, with anticipation of future inclusion of the area into the WMA system. On the Cecil Webb Area, new cattle grazing leases were negotiated, and a contract was signed with Charlotte County for shell and marl dredging to provide fish ponds. In cooperation with the State Division of Forestry, a field trial area program was developed on the Blackwater State Forest in Santa Rosa and Okaloosa counties. Negotiation with Owens-Illinois, Inc., and the Container Corporation of America led to the addition of the Cypress Creek Area in Hamilton County into the WMA program. Still in the negotiation stage at year's end is a proposed expansion of the Tomoka WMA and an addition to the Lake Butler WMA.

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TABLE 2. FLORIDA WILDLIFE MANAGEMENT AREAS IN 1974

		Acres
State-Owned Lands		
Blackwater		183,100
Brown's Farm		5,900
Bull Creek		20,800
Camp Blanding		70,000
Cecil M. Webb		62,500
Citrus		41,000
Croom		21,700
Everglades		755,300
J. W. Corbett		56,000
Richloam		55,500
Green Swamp		49,900
Three Lakes Ranch		51,484
	Total	1,373,184
Federally-Owned Lands		
Apalachee		6,000
Apalachicola		557,400
Avon Park		107,600
Eglin		464,700
Ocala		366,700
Osceola		157,200
St. Vincent		12,000
	Total	1,671,600
Privately-Owned Lands		
Aucilla		206,136
Edward Ball		65,025
Farmton		52,170
Fisheating Creek		71,668
Fort McCoy		18,609
Gaskin		115,555
Guana River		12,200
Gulf Hammock		68,453
Hudson		8,920
La Floresta Perdida		30,116
Lake Butler		101,291
Lochloosa		40,447
Nassau		80,589
G. U. Parker		17,000
Point Washington		165,000
Robert Brent		95,000
Steinhatchee		390,764
St. Regis		20,505
Tide Swamp		20,543
Tomoka		99,734
	Total	1,679,729
Recap: State		1,373,184
Federal		1,671,600
Private		1,679,729
	Total	4,724,513

Table 3. Statewide Annual Harvest Trends Of Major Game Species

Species	1970-71	1971-72	1972-73	1973-74	1974-75
Deer	48,600	48,900	58,500	57,122	54,200
Turkey	25,200	25,800	28,900	29,885	23,400
Bear	7	13	10	9	9
Wild Hog	36,000	38,700	60,900	84,128	36,200
Quail	2,423,500	1,712,700	3,154,800	1,969,950	1,433,700
Squirrel, Gray	1,630,000	1,458,000	1,333,000	1,412,890	1,201,900
Duck	546,965	522,500	510,700	469,774	380,800
Dove	2,157,400	2,219,300	2,650,300	3,758,350	2,368,300
Snipe	—	73,800	225,600	343,637	—

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A study was undertaken on the Bull Creek and the Green Swamp WMA's with regard to developing a rotational grazing system for cattle. The plan is patterned after a comparable system being utilized in Texas that has proved to be beneficial to both the cattle industry and to wildlife populations and habitat. The concept involves dividing large pasture areas into smaller pastures, then rotating intensive grazing by cattle for short periods of time (2 to 4 months per pasture), then allowing that pasture to lie fallow the rest of the year. The ecological effect is similar to the use of controlled burning in that plant succession is retarded and constant source of desirable wildlife and cattle plant species growth is stimulated, to the mutual advantage of both.

The Wildlife Management Division believes this concept is most promising for implementation in Florida. Commission biologists will be studying the technique in close cooperation with the cattle industry, the University of Florida, and the U.S. Soil Conservation Service during the next several years.

Commission biologists and wildlife management specialists began work on intensive habitat development for wild turkey on the St. Vincent National Wildlife Refuge. Activities included intensive planting of bahia grass along all road networks, planting of food plots, and controlled burning. The objective of the program is to build up the turkey population on the refuge to higher levels than at the present time, to provide a source of birds to be trapped and released on management areas statewide.

Commission biologists and wildlife management specialists began cooperative efforts with the Florida Division of Forestry toward the establishment of an extensive quail management—field trial area on the Blackwater State Forest WMA in northwest Florida. Two new positions were established by the Legislature for the Commission to conduct this operation. Progress under way at year's end included development of cooperative plans with Forestry to undertake controlled burning, thinning of forest growth, chopping and mowing to stimulate growth of desirable quail food species, planting of food strips and plots, and installation and operation of quail feeders.

An intensive program of establishing oak hammock was begun on the Avon Park WMA. Approximately 20,000 water oak and live oak seedlings were planted on selected areas. Over a period of years, these will significantly improve the habitat for deer, turkey, wild hogs, and squirrel on the area.

Wildlife Management personnel spent much of their time developing and maintaining the 39 WMA's on which 40% of Florida's hunters hunt. This is, of course, the most time-consuming job, and the one with the least glamor, but certainly the most important job accomplished by the Division each year. Untold man-days are spent on such efforts as controlled burning, planting of food patches, planting mast-producing hardwood trees, management of cattle grazing operations, waterfowl management, including the erection of wood duck nesting boxes and work at three waterfowl impoundments, maintenance and operation of quail feeders, operation of checking stations during hunting seasons, road and campsite maintenance and development, and a multitude of other important routine activities.

The Wildlife Management Division is currently undertaking an effort to train its field personnel in law enforcement, in order to re-establish their status as personnel qualified to enforce state and federal game and fish laws in conjunction with their normal wildlife management duties.

Prior to July 1974, field personnel of the Game and Fresh Water Fish Commission, in addition to wildlife officers, enforced hunting and fishing regulations and made arrests for violations while performing their primary fish and wildlife assignments. Such personnel include wildlife management, fish management and aquatic weed control specialists. Even though they were not full-time officers, they were commissioned and provided with 80 hours of police officer training. Utilization of these personnel for law enforcement functions not only provide a substantial contribution to our law enforcement effort, but also satisfied to a great extent the requirements for additional protection for lands made available for public hunting under the Commission's wildlife management area program.

In July of 1974, we were advised by the Police Standards Board (confirmed by the Attorney General) that no personnel of the Commission could legally make an arrest unless certified as police officers by the Police Standards Board under F.S. 23.061, which requires 320 hours of police training. The effect of this ruling was to prohibit the Commission's wildlife management specialists from participating in law enforcement activities, as they were not so certified and, due to budgetary limitations, could not be given the 320 hours of police training during FY 1974-75.

The Commission recognized that this would be a serious detriment to its enforcement abilities, particularly with respect to satisfying lease commitments for enforcement on wildlife management area lands, but it was only after the series of public meetings held by the Commission in February and March that we were fully aware of the tremendous public concern regarding this problem. Simply stated, the public cannot understand why a state employee driving a state vehicle cannot effect an arrest when he finds an individual in possession of an illegal doe deer or involved in some other game law violation.

To remedy this situation, it will be necessary to provide the complete 320 hours police training and proper law enforcement equipment for the wildlife management specialists. This will allow the Commission to (1) restore 28,000 man-hours annually to law enforcement efforts, which were not only severely reduced due to the Police Standards ruling but by the mandated 40-hour work week for wildlife officers; (2) satisfy the lease requirements for enforcement on lands within the wildlife management area program; (3) fully utilize our field force to assist in meeting all the Commission's responsibilities; (The involved personnel spend 50 to 80 percent of their time in the woods and on the waters where the need for their enforcemnt authority exists.) and (4) provide additional manpower during hunting season and at other times which require concentrated law enforcement activity.

Programs of equal import but occurring with lesser frequency throughout the year were investigations of bear damage to apiaries, beaver damage to croplands, deer foraging on crops, and wild geese destroying newly-germinated grain fields. Wildlife management specialists endeavored to assist property owners in resolving these depredations without unduly disturbing the wildlife populations.

Hunting of mourning doves continues to be popular with sportsmen in Florida, and a pronounced reduction in areas accessible for hunting has occurred due to over-expanding urban development in the state. The Wildlife Management Division began studies aimed at locating tracts of land within commuting distance of the state's heavy population centers which can be leased and will provide productive dove fields with a minimum of management activities. This program will be continued as the need prevails.

A source of continuing concern to the management areas of south Florida is the intrusion of the melaleuca tree. This Division, in cooperation with the Division of Forestry, the Central and Southern Florida Flood Control District, the National Park Service, the Florida Recreation and Parks Division, and the Soil Conservation Service spearheaded the establishment of a joint committee to effectively study the problem and to develop an eradication program.

During 1974, the Wildlife Management Division actively participated in writing, compiling, and editing the State of Florida Endangered Species Plan, as called for by the Endangered Species Act of 1973. The GFC was designated by Governor Askew to be the lead agency in the preparation of the state plan, and one of the initial steps taken was the establishment of an eight-man Technical Advisory Committee on Endangered Species. The committee is composed of highly qualified academic and governmental personnel, each versed in a different discipline of environmental concern. Proceeding in close cooperation with the Technical Advisory Committee and with the Department of Natural Resources, personnel of the Commission prepared and submitted to the Secretary of the Interior the Florida plan, as approved by the Governor.

The Division of Wildlife Management also prepared, for the Commission's approval, a policy statement to provide for the implementation of land management practices designed to promote full public utilization of the wildlife management areas under its jurisdiction for outdoor recreational activities. The Commission fully acknowledges, however, that the majority of land within its wildlife management area system is owned by landowners from both the public and private sectors. It further recognizes that, on land not owned by the Commission, the desires and the land management objectives of the landowner must be given consideration in formulating land-use plans.

Recreational activities given consideration under this policy shall include, but not necessarily be limited to, hunting, fishing, camping, hiking, picnicking, and nature study. The Commission directs that rules and regulations, and a time schedule for recreational uses of wildlife management areas for other than hunting, shall be included in management area regulations each year. Recreational activities or other uses may be prohibited or restricted on certain areas where, during certain periods of the year, such uses are incompatible with higher priority uses or detrimental to the welfare of important or unique forms of plant or animal life or ecological communities.

With the continued increase of the human population in Florida, there will be greater contact between people and wild animals in the same environment. It is logical to assume that as human populations continue to encroach upon natural bear habitat, there will be an increasing number of complaints about bears. Therefore, the Com-

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Farming for wildlife. The important undertaking of division field men includes such activities as development of wildlife food plots, right, plus controlled burning and chopping of rough vegetation to favor production of the more desirable food plants.

Photo By Jim Reed

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mission requested the Wildlife Management Division to prepare a proposed operating policy to be carried out in handling these complaints. Commission action on this proposal will be scheduled in the near future.

All bears taken by Commission personnel from 1970 through 1974 were taken in the two northern regions and the central region, with the two northern regions accounting for 68% of the bears captured. All bears were taken alive, except one that was killed in a populated part of Panama City. Of the 25 bears that were captured, 19 were considered "nuisance" bears. Eight of them were raiding beehives, 10 were causing damage to wildlife feeders (quail) or dog pens, and one was raiding outdoor garbage cans. Every one of the nuisance bears was captured in a situation where the bear was obviously after food. Five of the six non-nuisance bears were captured for scientific study, and one was captured because it wandered into Winter Park. All respondents dealing with bears felt that every bear complaint should be thoroughly investigated, preferably by the regional wildlife biologist, and that this information should be recorded on a standard form. They also felt that the complainant should show that he has in some way tried to prevent the damage (if damage was reported), and that there should be preselected relocation sites.

All nuisance bears will be used to restock vacant but suitable habitat on a priority basis. The priority will be based on the quality of the habitat.

Wildlife management specialists trapped 113 deer, 36 wild turkey, and 540 hogs, and relocated all to areas open to public hunting statewide.

At the Chinsegut Nature Center, established by the Florida Audubon Society, the Division was actively involved in providing technical assistance in developing management practices. As a result of his diligent professional efforts toward bettering the ecological and biological integrity of the Chinsegut Nature Center, Wildlife Management Biologist Stephen B. Fickett was singularly honored by the Audubon Society, which conveyed to him the Allan Cruickshank Award. Fickett is the first recipient of this award, which is especially significant since he was a long-time personal friend of photographer-naturalist-conservationist Allan Cruickshank, who died in 1974.

Research has not been neglected during the past year. Biologists continued internal parasite and jaw bone studies on Florida deer. Acquisition of a federal surplus van provided the start toward implementation of a deer telemetry study on the Everglades Wildlife Management Area. Statewide surveys were carried out on the bald eagle and on Florida waterfowl. A heron survey was commenced along the northern Atlantic coast area of the state, under contract with the U. S. Fish and Wildlife Service. In northwest Florida, one black bear was trapped and fitted with a radio transmitter, and is providing biologists with information about daily movements, reaction to intrusion (dogs, hunters, hikers, etc.) and location of preferred food habitats.

Research findings sometimes do not come until the problem has disappeared or solved itself. Occasionally, however, wildlife studies uncover facts that are useful immediately. The nine-year study of the endangered brown pelican has some elements of both. The brown pelican, a species that nests and lives its life on the coast, became extinct in Louisiana from unknown causes, about 1962. Aerial census of the pelican population in Florida was initiated as a precautionary measure. By 1970, it was apparent that Florida's pelicans were not disappearing; in fact, the population was stable at 20,000 pelicans.

But as of 1968, the brown pelican had not returned to Louisiana. A study was initiated with the dual objectives of restocking Louisiana's vacant pelican habitat and learning what happened to the original population. The restocking program involved the annual shipment of 100 large nestling Florida pelicans to Louisiana habitat. It was successful, and by the winter of 1974-75, Louisiana had a growing flock of about 500 pelicans. Unexpectedly last winter, the second objective was partially achieved, with considerable disappointment, when 80% of the new Louisiana pelican population died of what was determined to be acute pesticide poisoning.

The large Louisiana pelican die-off, as disappointing as it was, probably was only a repeat performance of what had happened there in 1961 or 1962. Now for the good news: Environmental and pelican tissue samples indicate that the environment of Florida's brown pelicans is virtually without even traces of the pesticide that killed off most of the Louisiana population last winter. We will be watching closely for that pesticide—with the hope that it does not materialize in Florida.

Florida may never have more wild turkeys than it has now. After fairly steady increases in numbers, and a statewide trapping and restocking program, the population stood around 100,000 during the fall of 1963. During the period between 1964 and 1966, almost without exception, populations declined drastically, as a result of undetermined causes, to about 50% of their former numbers. The recovery since has been slow, but most habitat now has attained its "normal" turkey population. While statewide populations were recovering from that

Photo By William Greer

Homing in on a radio-equipped bear. Commission biologists use specialized equipment to learn the facts on daily movements as well as other facets of lives of various wildlife species.

unidentified malady, good turkey habitat was being systematically eliminated by the encroachment of civilization. Present populations of about 70,000 wild turkeys are the most we will likely ever see in Florida. The competition of human impact has had, and will continue to have, a deterrent effect on available turkey habitat.

The Wildlife Research Section is conducting broad wildlife studies in the vicinity of the Oklawaha River under a contract from the U. S. Army Corps of Engineers. The study plan deals with wild plants, invertebrate animals, reptiles, amphibians, birds, and mammals. The objective of the $215,000 study is to evaluate the probable impact of the proposed Cross Florida Barge Canal on wildlife in the vicinity.

During the last year, conflicts between alligators and people continue to increase with the rising alligator and human populations. The first phase of an accelerated research program to develop an alligator management program was initiated. This includes a system of statewide transects to census gator population trends. These transects revealed some of the most dense populations in the United States. In addition, a public opinion poll was designed, and a management-oriented research project was set up to test the effects of harvest upon alligator populations. By next year, specific findings and recommendations will be available.

Other research activities involved a status report on the black bear and otter, an investigation of the influence of human disturbance on wild turkeys, a study of the effect of high water on deer in the Everglades, a food habits study of the exotic armadillo, and several other long range investigations. These and other reports of interest to sportsmen, conservationists, and the general public may be obtained free of charge by writing to the Wildlife Management Division, Florida Game and Fresh Water Fish Commission, Tallahassee, Florida 32304.

With a reasonable amount of operating capital available, the Division was able to replace a significant number of patrol vehicles and specialized equipment in past year. Wildlife officers posted 7,636 cases in 12-month period.

Photo By Laurence Rossignol

Law Enforcement

LONG-RANGE PLANNING, evaluation of existing enforcement programs, and implementation of specialized enforcement projects and administrative reorganization were the keynotes of 1974-75.

The Division expended considerable time implementing and revising procedures concerning the 40-hour work week, 24-hour communication system, and Florida and National Criminal Investigation Center terminal capabilities. Although these programs are relatively new, their cumulative effects have completely revamped past enforcement efforts. In particular, the institution of a shift schedule for wildlife officers, to insure maximum utilization of time and effort within a 40-hour work week, necessitated considerable attention and constant revision until the best possible system could be developed. Although the available law enforcement man-hours are still less than desirable, we feel we have developed the most functional and productive shift schedule within our current capabilities.

The continuing increase of alligator-related problems continues to be an issue of grave concern to Law Enforcement, because of its drain on an already strained manpower availability. More than 7,500 nuisance alligator complaints were received during 1973-74, and more than 2,500 gators were actually captured and relocated.

With spiraling interest in promulgation of federal laws affecting fish and wildlife, the Enforcement Division became progressively more involved in reviewing and commenting on the potential impact of these laws. Such federal legislation as the Endangered Species Act of 1973, the International Endangered Species Treaty, the Injurious Wildlife Amendment to the Lacey Act, the falconry amendment to the Migratory Bird Treaty Act, the Marine Mammal Act, and the proposed accreditation bill for zoological parks have consumed a great deal of time and effort. Since these federal enactments have a significant impact on the functions of a state wildlife agency, it has proven essential that we take an active role in the review of these laws and through negotiations, propose compromise amendments that will be in the best interest of the respective state programs.

Particular emphasis has been placed by this state on a pilot program to consolidate numerous state and federal wildlife permits. Significant progress has been made in this regard, and the project, if implemented, would certainly increase the responsiveness of regulatory agencies to the public they serve.

The Division's inspections program was fully implemented this year, and is rapidly proving its worth in

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this specialized field. The inspectors, strategically located throughout the state, are responsible for monitoring the importation, exhibition, propagation, and sale of fish and wildlife. Early reactions indicate an overwhelming success in stemming unwarranted commercial exploitation of certain species, preventing inhumane treatment of captive wildlife, and reducing the frequency of illegal imports or exports. This specialized function of law enforcement is destined to expand as interest grows in regulating these wildlife-oriented enterprises.

The basic requirements for new wildlife officers were upgraded this year, requiring 2 years of college, or 2 years of law enforcement experience, or 2 years of honorable military experience, or 3 years of progressively responsible work experience dealing with the public. Through its selection of new officers and training programs, the division is continually seeking the best qualified and subsequently the most professionalized wildlife officer candidates.

The Division of Law Enforcement has expanded its responsibility to instruct courses in environmental law enforcement for 40 accredited Police Standards curricula for all law enforcement officers in Florida. Wildlife officers are well equipped to instruct this broad-based course for prospective enforcement officers, because of the knowledge and experience gained from our diversified enforcement program. As indicated in previous reports, we are continually improving our efforts to meet the demands of all environmental enforcement problems. Such a program encompasses active participation in pollution control, habitat preservation, dredge and fill, humane treatment, boating safety, police support services, search and rescue, and both game and nongame-oriented functions.

The Division was allocated a reasonable amount of operating capital outlay this year, and was able to replace a significant number of patrol vehicles and specialized equipment. One hundred and twenty-eight new patrol vehicles were purchased during the year.

Wildlife officers posted 7,636 cases during this reporting period. Cases relating to the illegal taking or possessing of deer numbered 190, while gun and light cases totaled 216, and alligator violations slightly decreased from 59 in 1974 to 44 during 1975. Fishing without a license remained the leading category, with 3,034 citations issued. Boating safety violations totaled 843. A total of 70 narcotics violations were recorded, and officers were involved in 78 traffic-related cases. Resisting arrest charges accounted for 42 arrests and continues to be a serious concern of the Division.

Prospective hunter safety instructors in training session. In the past three years, volunteer instructors have donated time and skills to train 22,000 Floridians in safe gun handling and other matters related to the shooting sports.

Photo By Frank Moffat

Information and Education

IT HAS BEEN SAID that the Information and Education Division is the sales agency for wildlife conservation and the advertising agency for the Game and Fresh Water Fish Commission. There is a tradition of not blowing our own horn, as we believe our recognition lies in the success of programs we have handled. As with an advertising agency, the division handles its "sales" campaign through a broad array of outlets. Within the division, there are five separate programs which are carried out on a year-around basis. These are general information-education, audio-visual, conservation education, the wildlife reserve program, and hunter and firearm safety training.

General information and education: Division personnel includes five regional education officers who are responsible for activities within their assigned regions. These officers are responsible for implementing programs on a regional level. These programs include the overall statewide operation as it applies to their region. Their other work is of a grassroots nature, to meet specific problems at a local level.

News and information releases: The division is in its second year of offering a news and information packet to the statewide news media on a biweekly basis. The packet is mailed to all media and all sportsmen and conservation clubs for reproduction in club bulletins and newsletters. Special biweekly news packets are mailed to radio and television media in which copy is prepared for the listener's ear rather than the reader's eye. In addition to the regular biweekly mailing, the division, both at statewide and regional levels, issues special news releases and a press-ready column.

During the past year, the division received two first place awards from the Florida Outdoor Writers Association, for outstanding news coverage by television, and special program promotion by all media. In addition, the division was recognized on a third and fourth place level for overall news and information services on a national level.

Exhibits: The division designs, constructs, and maintains exhibits at a number of fairs and exhibitions throughout the state. These provide an opportunity for maximum exposure to visual concepts of conservation and serve as a medium for the exchange of communications between the officer on duty and the viewer who might never meet a member of the Commission in his daily way of life.

Audio-visual: This bureau has the responsibility of transforming ideas into graphic presentations. As programs have increased throughout the state, so has the workload and responsibility of this section. The talent of this section is available to any division as well as to the field personnel. During the past year, the duties of audio-visual have been expanded to include the responsibility for distribution of publications.

Conservation education: This bureau has the wide responsibility of many activities that may fall within the umbrella of conservation education; however, one major function is the operation of the two Youth Conservation Camps.

During the past year, the two camps came under complete and total budgetary operations of the Commission. Prior to this action, the camps were, in essence, self-supporting operations, with camp fees being used for camp operations—which many times created financial difficulties. During the past year, both camps received considerable improvements, with expansion of the facilities at the South Florida camp and general repair and renovation at the camp located in central Florida.

In addition to the camp programs, a major effort of this bureau was the production of a series of television programs entitled "Florida's Backyard"—made in cooperation with ETV.

Wildlife Reserve: The Wildlife Reserve program is an operation that involves the Commission and uniformed citizens interested in wildlife conservation. The program has become an important function of the division operation, and has extended the conservation arm of the Commission by freeing regular personnel for more demanding responsibilities.

Reservists are identified by a uniform consisting of khaki shirt, olive trousers, trooper-style hat, a distinctive shoulder patch, and the badge of a wildlife reservist. Duties and assignments of the reservist are many, ranging from lecturing on bird watching to capturing a nuisance alligator to helping a wildlife officer apprehend a game law violator. Activities of the reservists are coordinated and supervised by a reserve coordinator who is a full-time employee of the Commission.

Hunter and firearm safety training: This bureau has a two-fold objective: (1) to teach safety in the handling of all firearms and bows and arrows, both in the hunting field and in the home; and (2) to combat the slob-type hunter, with the ultimate goal of eliminating this image from the Florida sporting scene. During the past year, the statewide H&FST program was expanded through the employment of five regional safety supervisors to provide local contact and communication with the state's volunteer hunter and firearm safety training instructors.

During the past three years, certified instructors, who volunteer their time and teaching skills, have trained in excess of 22,000 Florida hunters. Each student is required to participate in a minimum of 11 classroom hours of training, and experience the actual firing of both rifle and shotgun plus a simulated field hunting trip.

In summary, the Information and Education Division of the Game and Fresh Water Fish Commission always looks toward the future with the concept that the future is now; that what we do today will have an impact on tomorrow. We feel that the vital role of serving as the communication link between the Game and Fresh Water Fish Commission and the citizens of Florida helps to assure a brighter future for wildlife and natural resource conservation in the Sunshine State.

Environmental Protection

DURING THE 1974-75 FISCAL YEAR, the Environmental Protection Section has served the Commission, as well as the citizens of the State of Florida, by working to insure habitat protection. The Section operates under the premise that there can be no wildlife without adequate habitat. Whether finned, furred, or scaled, wildlife species have evolved or adapted to relatively specific environmental conditions, and their abundance and health is usually adversely affected by activities which contaminate or seriously change their habitat.

Despite—or perhaps because of—a national economic crisis, Florida continues to experience a tremendous growth surge. During the past year, the net population increase rate for the state often hovered around the mark of 7,000 persons per week. Driven by this growth rate, development pressures continued statewide, creating additional strain on the already overstressed natural systems of the state. In efforts to control or to mitigate development pressures on the natural environment, several state and Federal laws have been implemented requiring coordination between potential developers and various state and Federal agencies. In cases involving alteration of wetlands, developers are usually required to secure permits from the appropriate state and Federal regulating agencies. Although the Commission does not actually provide permits in these instances, it is active in the permitting process on both the state and Federal levels in an advisory capacity.

During the past year, section personnel reviewed approximately 1,200 U. S. Army Corps of Engineers permit applications and nearly 500 Trustees of the Internal Improvement Trust Fund applications. Although many of these projects were of no great environmental significance, a large percentage involved a biological inspection by staff biologists. Whenever a project was found to constitute a threat to the biological productivity of the area, a statement was issued to the appropriate agency providing a biological assessment of the project site, an estimate of the environmental damages which would occur during or after project implementation, and recommendations for project design modifications, or, in some cases, for denial of the permit request.

Occasionally, confusion arises over the fact that the Commission provides responses to a Federal agency or exercises jurisdiction in coastal waters. Under the Fish and Wildlife Coordination Act, the state agency primarily responsible for the fish and wildlife resources of a particular state is to provide biological comments relative to any development involving alteration of wildlife habitat and requiring a Federal permit.

The Corps of Engineers requires a permit for any development which occurs in the territorial waters of the country. As a result, the Environmental Protection Section, representing the Commission, is requested to provide biological comments on each of these projects throughout the state.

(Continued on next page)

Photo By William Greer

Protection of land and water habitat is not only beneficial to wildlife, but man as well. Both need fresh, clean water.

(Continued from preceding page)

In a similar vein, but on the state level, the Environmental Protection Section provided comments to the Trustees of the Internal Improvement Trust Fund relative to applications for state permits for wetlands development. These comments are considered, along with those of other state agencies, and used as bases for final decision.

The past year witnessed an increase in enforcement activities on the part of both the Corps of Engineers and the Trustees of the Internal Improvement Trust Fund dealing with illegal projects. Their increased activities brought a corresponding rise to the section's workload in the form of requests for comments relative to the probable preproject condition of the development as well as recommendations for restorative measures.

The Environmental Protection Section also provides comments representative of the Commission to the Department of Administration, A-95 Clearinghouse. The Clearinghouse invites review and comments from all interested state agencies and collates these into a unified state response to proposed Federal agency guidelines and many projects involving Federal aid. Through this process, the section commented on 144 proposals and operating statements during Fiscal Year 1974-75, including such projects as the "Ten Year Management Plans" for the Osceola and Apalachicola National Forests and the canal system hydrographic assessment of the massive ITT Palm Coast project in Flagler County.

Approximately 100 Public Works programs were reviewed and acted upon by the section during the past year. Many of these were Department of Transportation projects involving alterations to wetlands. Most notable of these was the Florida Keys bridge replacement program, involving the replacement of 37 bridges in the Florida Keys and the extensive dredging and filling of highly productive marine bottomland. Other programs in this category involved the various harbor deepening projects throughout the state. These activities required the section to advise on the suitability of the proposed spoil sites, with an emphasis on the protection of biological resources.

Occasionally, the section was requested to provide technical assistance to local groups such as regional planning councils and county commissions. This type of assistance is primarily directed toward advising and persuading potential developers that wildlife habitat can be seriously affected by land use projects and that wildlife values should be considered in the planning of such projects. At the developer's request, advice is provided on project modifications designed to reduce or eliminate adverse effects on fish and wildlife. To be effective, the advising environmental specialist must have a working knowledge of the particular types of habitat which will be affected as well as the developer's project design. Often, close coordination with Fisheries or Wildlife Management Division biologists is necessary to provide a complete biological assessment and to come up with design modifications that are acceptable to the developer while minimizing damages to fish and wildlife habitat.

Another activity of the section, and one on which particular emphasis is placed, is to provide input into the state's Environmentally Endangered Lands program. The section, representing the Commission, provides biological assessment and technical assistance, and occasionally initiates action involved with the purchase and preservation of endangered lands.

Approximately 70 Environmentally Endangered Lands proposals were reviewed this past year, including the important and controversial Rotenberger Tract in Palm Beach County. The controversy arose over the management objectives and proposed restoration of water levels in the area to approach their predrainage condition. The Environmental Protection Section, with a representative sitting on the Interagency Planning Council, was instrumental in the modifying of this proposal.

The Division of State Planning also received technical assistance from the Commission through the Environmental Protection Section. These activities centered around the fish and wildlife considerations of two key plans: the management of the Green Swamp Area of Critical State Concern and the Special Project to Prevent the Eutrophication of Lake Okeechobee, which includes the entire Kissimmee Basin. Additionally, the section provided a brief review of the Florida Keys Area of Critical State Concern proposal.

An aspect of the Green Swamp study which might prove to be especially valuable to the Commission is the development by a section biologist of a method by which approximations of wildlife values can be assessed by utilizing plant communities.

Fiscal Year 1974-75 was also a year of growth and change for the Environmental Protection Section. Several new environmental specialists were hired to expand the staff to handle greater workloads. In addition to their regular duties, the new specialists also manned the Environmental Centers which were opened during the last half of the year. The fate of these centers is uncertain, however. Their function was to serve as decentralized offices for the various environmental agencies to provide immediate local technical assistance and to simplify the state permitting process. With the exception of the Commission, all state environmental regulatory agencies were organized into the singular Department of Environmental Regulation, effective July 1, 1975. This action, while possibly negating the need for the environmental centers, places additional emphasis on the Environmental Protection Section of the Game and Fresh Water Fish Commission, which is now one of the two state agencies involved in the process of environmental regulations. We find ourselves in the unique position of being the sole state agency whose primary concern is wildlife and, yet, is active in the decision-making process. We, as wildlife managers, must continue to anticipate widespread environmental changes resulting from land development. As the land changes, so will the species, numbers, and diversity of the native wildlife, and only by preserving habitat can we guarantee continued wildlife populations for ourselves and future generations. ●

Slingshots of Autumn

hunting season is here, so all your sighting-in and ammo selection should be completed—but you might add a bag of marbles

By EDMUND McLAURIN

In the majority of Atlantic seaboard states November is the magic month of open deer season. Smart bucks lose little time taking the best escape routes and seeking hoped-for havens of safety. About now, beseiged and wearied gunsmiths wish they could, too! They have more scope-mounting jobs than they can get done.

Consider yourself fortunate if you shoot a rifle and are sure of starting this deer hunting season with an installed, sighted-in scope sight. If you are not so counted, take heart. The season runs for weeks. Your scope job may be the one your gunsmith finishes next.

Optically, a good scope sight is the best sighting aid that can be had. But even a top quality scope sight is no better than its mount—meaning its holding base or bases and tube-clamping rings. Too many shooters purchasing a scope sight wrongly conclude that just about any selected scope sight mount can be teamed with their scope for good performance. Often it cannot. For all brands of scope sight mounts there is a specific listing for make and model of rifle. You must have the correct one.

Theoretically, mounting a scope on a hunting rifle should not constitute much of a job, now that rifle manufacturers invariably furnish popular models factory-drilled and tapped for scope sight installation. Seemingly, the job requires only removal of the dummy screws from their holes, hole alignment with the holes in the scope sight base or set of bases, and substituting and tightening the holding screws that come with all sight bases.

Usually a truly satisfactory scope mounting job does not prove that simple. There are too many possible variables—such unanticipated factors as slight screw hole misalignment, insufficient bolt operation clearance or lack of sufficient eye relief once scope sight is installed, etcetera!

In my opinion, the best type of scope mount is one that puts scope sight tube in low, central over-bore position. There are many makes and models that give such mounting.

However, some rifle models cannot be fitted with top-of-receiver base or bases and, instead, require a mount that attaches to side of receiver, yet places scope tube centrally over-bore. A few models even require offset mounting of scope tube in relation to vertical line of rifle bore. A side mount meets either need.

Unless a rifle has been factory drilled and tapped for attaching a side mount, installation of a mount of that type should not be attempted by an amateur. Besides precise receiver drilling and tapping, there is the initially more difficult task of locating the side mount on the receiver so that it is square in every direction.

Pachmayr, Griffin & Howe, Weaver, Jaeger and Williams are sources for ready-made side mounts that match receivers of standard rifle models that come drilled and tapped for side mount installation. Savage makes one for its Model 340 rifle, and B-Square Company, along with Williams, can furnish a side mount for a Winchester Model 94 lever-action. Numrich Arms Company makes a side mount for use on the M1 Carbine. These ready-mades, combined with already drilled and tapped receivers, put many side mount installations within the capability of careful home gunsmiths.

With a side mount, the inertia of the scope sight itself acts against the recoil of the rifle to cause a twisting action of the mount base against rifle receiver, with tendency to ultimately loosen holding screws. Base holding screws of a side-type scope mount should definitely be coated with Loc-Tite or epoxy cement.

(*Continued on next page*)

Consider yourself very lucky if you are hunting this season with a rifle equipped with a scope sight, accurately zeroed to take maximum advantage of bullet flight trajectory curve.

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Mounting of a scope sight (either on top of rifle receiver or side) on an older rifle model not factory-drilled and tapped for scope sight installation should be left to a professional gunsmith. Expert use of a drill press is required, and the depth of the screw holes must be held to critical measurement. A bit too deep—as often happens with amateurs—and the drill bit will cut through into rifle chamber or barrel bore, ruining them.

Certain obsolete takedown-type rifle models, like some of the early Savage Model 99's, can present their own special scope mounting problems.

Sometimes adapter plates have to be handmade and fitted, so that mounted scope sight is independent of any possible movement of barrel relative to receiver, for maintained zero after sighting-in.

Solid construction scope holding rings are strong and neat in appearance, but require undesirable unscrewing of scope eyepiece to permit at least one ring of a pair to be slipped on scope tube. Better are split-style rings, as they can be installed on scope tube at any desired spot without removing either focusing eyepiece or a scope turret.

When either bore sighting or test firing, radically needed changes in scope windage should first be made in scope tube by shimming holding rings, or in scope mount base itself if provided for by its manufacturer.

The Redfield, Jr., the Buehler and Williams QC mounts have either opposing adjustable screws or eccentric bushing in base to permit generous windage adjustment latitude independent of the scope sight's own internal windage adjustment.

Bushnell has come out with an innovation that permits a substantial windage adjustment right in mounting rings, by simply reversing ring segments. Another feature is use of Allen-type screws in ring assembly. Your scope "stays put" once correctly positioned and tightened up in ring mount.

The different brands of holding rings are made in diameters that are supposed to give tight, even-clamping fit around scope sight tube. Unfortunately, they frequently do not. Many scope sight tubes of so-called 1" diameter (the size of most hunting scope sights), for example, may have diameter variation along their length, resulting in looseness that demands shimming for uniform gripping by inside surfaces of holding rings. Scope slippage in ring mounts, on firing, is a sure cause of inconsistent accuracy.

Treating contact surfaces with powdered rosin before final tightening will virtually assure against later scope slippage from firing recoil.

Where a scope mount base is to remain on a particular rifle for years, I usually also coat the underside of the scope mount's *base* with a thin film of epoxy cement when making installation. The base is sure to stay in place until the day someone has reason to remove it. (By applying the clean tip of an electric soldering gun to the base and holding screws, they can be loosened.)

Many hunters want to have their rifle's metallic sights available—just in case. For them, pivot-style scope mounts, as found in the Weaver Pivot, Redfield Pivot, and the Pachmayr Lo-Swing models, have long been available. These mounts permit fast, optional use of metallic sights simply by swinging the scope, in its holding rings, to one side on a noiseless base hinge.

Newer are tunnel-type, or see-through, rigid scope mounts that put both scope and metallic sights in over-bore vertical alignment, with the metallics seen through the tunnel portion of the mount. The Holden, Kwik-Site, and Williams Sight-Thru are typical examples.

Either type—pivot or tunnel—has the disadvantage of creating variables in the shooter's cheeking of the comb of the rifle stock and the resulting optical sighting plane.

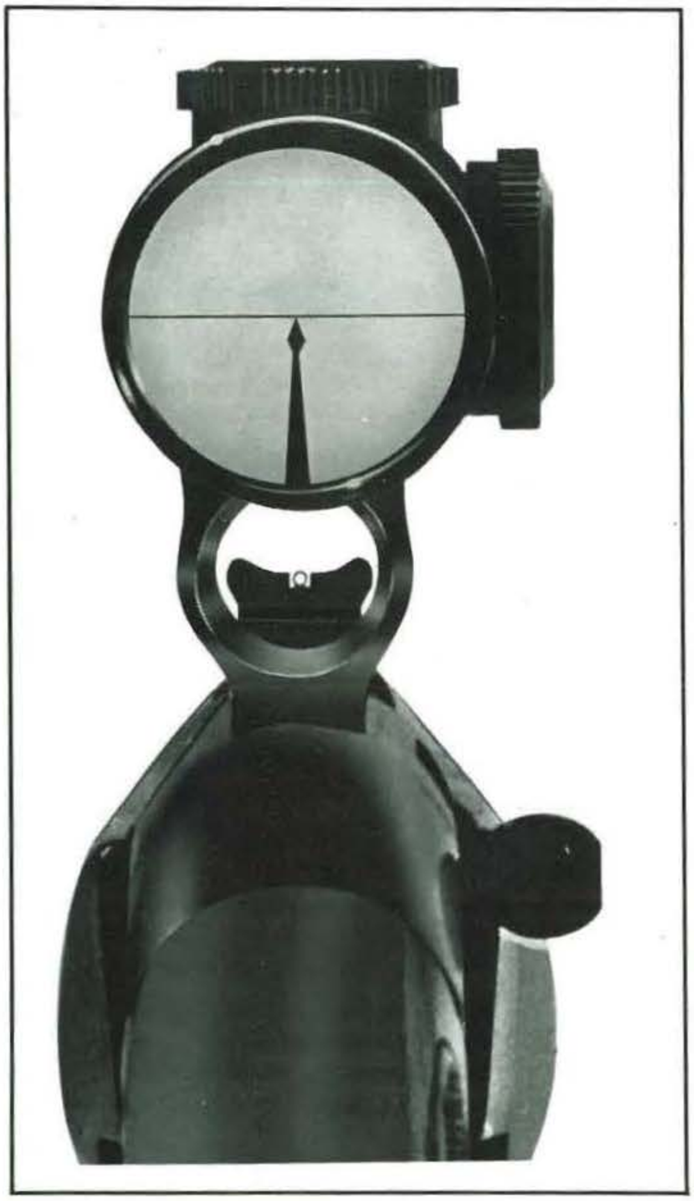
A scope sight mounted typically 1½ inches above center of rifle bore gives a higher line of sight and a flatter, more useful bullet flight trajectory curve than would be the case with average metallic sight combination.

A fired bullet crosses line of sight at two points —one only yards from muzzle and the other quite distant, depending on velocity in flight. The higher the velocity, the longer and flatter will be the bullet's trajectory curve between the two zero points.

The secret of most successful use of a scope sight-equipped rifle is to select one particular bullet weight, and then sight-in for a point blank range that takes maximum advantage of bullet trajectory curve, without bullet rising more than approximately 3 inches above line of sight anywhere along its curved flight path.

Consider the case of a .30-06 caliber, scope equipped rifle firing a 180 grain soft-point bullet (commonly used in that caliber for big game hunt-

At right, Bushnell Model 76-3102 Riflescope Mount Rings.



A tunnel type of scope sight mount permits combining the mounted scope with already installed factory open sights.

ing): Sighted-in to hit point of aim only 24 yards from muzzle, the same sight setting will have its second zero very close to 200 yards, with no greater than 3.1 maximum rise in bullet trajectory curve between the two zero points. With such scope sight adjustment, the big game hunter can aim directly at a target anywhere between muzzle and 250 yards, without bullet trajectory rise and drop causing a miss.

It's all simply explained in a concise text, *How To Sight-in A Telescopic Sight,* published by Bausch & Lomb, Rochester, New York 14602.

A VALUABLE BUT RARELY CARRIED—and therefore unappreciated—hunting accessory is a common slingshot with a few marbles as ammunition. The relatively few hunters who do carry and use one under applicable field conditions vouch for their practicality.

Take dove hunting, for example. To the chagrin of legions of hopeful dove hunters afield every season, doves frequently fly into hunted areas and light midfield or at some spot well beyond effective shooting range. But, fortunately for the hunter, another dove flight characteristic is its tendency to fly in a wide circle, once awing.

This is where a slingshot enters the picture. One or two marbles lobbed in the general direction of grounded doves will put them into flight, and they'll likely circle within range of some waiting gunner. Although not infallible, the trick has worked many times. Birds circling over a hunter-fringed field, or even put into startled flight for a lone hunter, usually results in more shooting.

Squirrels that have detected a hunter's approach will invariably try to hide on the far side of a tree, where they are apt to stay unless the hunter quietly exercises a lot of patience or a little ingenuity.

Bouncing a marble off the trunk of a neighboring tree on far side of hidden quarry will likely cause a squirrel to change to a new location—usually somewhere on your side, away from the sound of the striking marble. It is at such times that an alert, fast-acting hunter can get shots.

Surprisingly, a slingshot with marble ammunition can be occasionally useful to the deer hunter.

In Florida, white-tailed deer like to make maximum use of thick brush for concealment. Quite often, a waiting hunter on stand will see deer moving but not be able to identify a buck among them before they have re-entered concealing brush. The hunter definitely knows they are there, waits long and patiently, but sees nothing.

Then is when a slingshot can possibly get action! A marble can be lobbed at such an angle that it will hit some spot on the far side of the suspected location of the cautious animals. Quite likely, the deer will start running away from the sound of the marble hitting and ricocheting from trees or ground. A buck, however, may take off in a different direction, but, again, likely one on the near side from the disturbing sound.

I had a chance to experiment with slingshot and marbles on three does during last year's hunting season. I had seen the deer enter a large patch of brush. I knew they were there, but couldn't get anything better than occasional glimpses, even with binoculars. However, when I lobbed a marble in their direction, over low brush concealing them, the three does slowly walked out of their hiding place, in my direction.

Later in the season, using the same method I flushed a lone, initially unidentified deer from a patch of thick brush in which I glimpsed it slowly walking away from me. When I released the marble in its general direction, the animal simply moved into the open at a slow trot, occasionally stopping and looking back in the direction of the disturbing noise.

It *could* have been a buck. ●

gone from his haunts, but certainly

not forgotten is . . .

OLD CRIP

THE MORNING WAS DARK AND FOGGY, making the hour's drive to DeFuniak Springs seem longer than usual. Jody, my 11-year-old number two son, was asleep on the seat beside me in the pickup, leaving me alone with my thoughts about the day ahead. It was January 4—the first Saturday in 1975.

I wondered if C. T. had phoned Delbert Spence and told him about the events of the afternoon before. I hoped Delbert could hunt today and would have the little blue bitch he uses for slow trailing. Above all, I hoped it had not rained enough to wash out the big buck's tracks where darkness had forced us to quit trailing the previous evening.

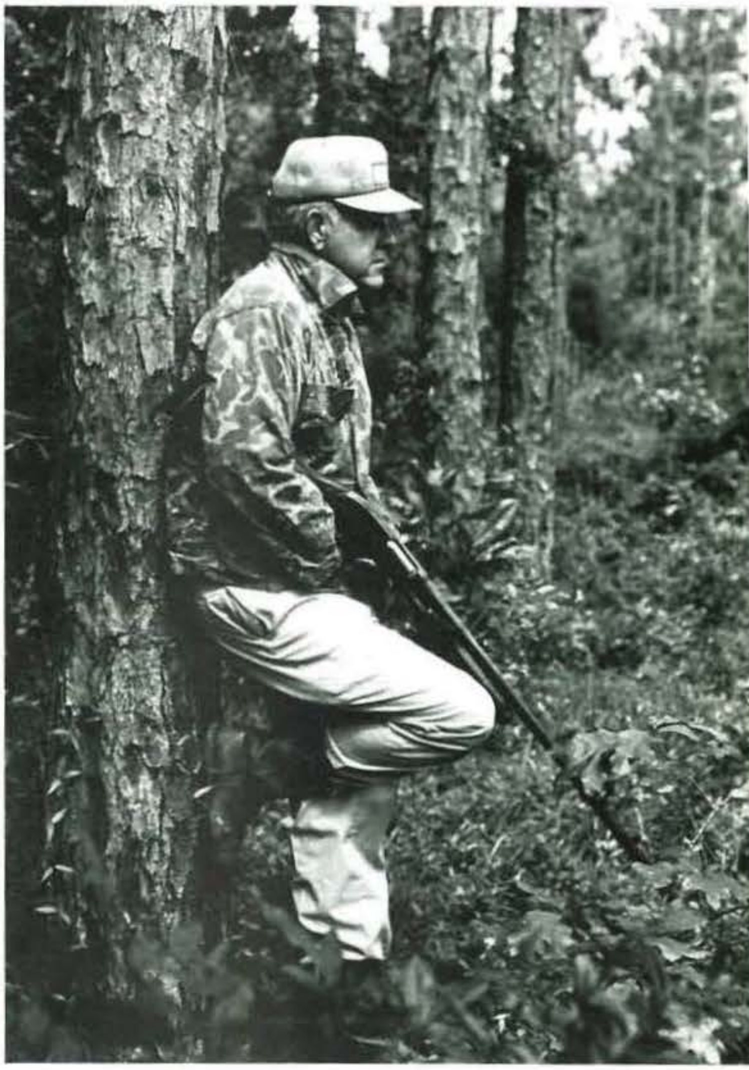
I subconsciously speeded up when I recognized Delbert's voice on the CB radio, calling C. T.'s numbers. C. T. Chesser had a slow, deliberate manner of speaking, but when he responded, I could detect an eagerness in his voice, and I knew he shared my anticipation for the hunt ahead. Their conversation about the weather was disturbing, although I couldn't quite understand what they were saying about the amount it had rained.

We were still about 15 minutes from our rendezvous point, and the fog was turning into a steady drizzle. If only the rain would hold off long enough for the little beagle to smell that cold track, we still had a chance to get a deer that had eluded us not only the afternoon before but for at least four seasons.

Although we weren't to know until after it was over, we were trailing Old Crip, as wily and cunning as any buck deer that ever made a track on the sandy blackjack oak ridges in the panhandle of northwest Florida.

This particular animal with the deformed left hind foot—probably caused by a close call with a hunter years ago—apparently learned well from that experience. He seemed to have some uncanny sense of knowing when we would be hunting in his feeding range and would invariably avoid detection.

Only one time three years before, in a chase that lasted most of a day and covered many miles, during which he scattered dogs all over the eastern part of Walton County's Eucheeanna Valley, had we actually run this buck. Not only did he avoid being shot that day, none of us even got a glimpse of him.



This is not to suggest that this buck was extraordinary to the point that he did not feed and cavort with his contemporaries in the luscious pastures and soybean fields where fresh tracks are abundant almost any morning we hunt. Regular reports have come from friends and other hunters who have seen the unusual track of Crip. It looked as if it had been made by a stump of a hoof or by a bone which might have stuck straight into the ground on the left side of the way the animal was travelling.

Also frequently seen was this same spike mark in the fighting area, where it was apparent that Old Crip had not only met his adversaries but had butted, hooked, and shoved them around, showing clearly his strength and establishing his reputation as Mr. Buck Deer to all within his jurisdiction. The strange part of all this is that this auspicious sign always would be a day or two old when we found it.

Many hunters searched for sign of this elusive deer, and we all agreed there was a mystic quality about this phantom that aroused our curiosity and imagination. I, for example, was sure he had a massive rack of at least 10 points, and the wide, deep tracks he made in the soft earth surely put him in the 200-pound class.

Everyone in our party had his own idea of what it might take to bag Old Crip, but we all agreed he would not be taken easily. I could imagine an all-day race with a box or more buckshot fired at him before the dogs finally bayed him in a mortal fight in some distant swamp. While the actual event was less complicated, it was no less exciting than I had imagined.

The events leading to the downfall of the noted buck began on Friday rather accidentally, which seems appropriate since Crip did not earn his reputation by making mistakes.

C. T. and I were hunting alone that morning. We were also looking for John John, one of his prized beagles, to return from an earlier race that had gotten away from us. We were riding together in C.T.'s truck when we saw something white about a quarter of a mile across a pasture. I commented that it might be his dog, so C.T. stopped and got out for a better look. While I was deciding it was just a piece of paper, C.T.'s attention was riveted on the ground beside the truck. He had stepped out on a huge deer track that had been overlooked in our early morning rounds. It was nearly noontime and the tracks didn't look very fresh to me, but C.T.'s more experienced eye detected a little sand on a leaf in one track, indicating it had been made sometime after the dew had fallen the night before.

Photo By Bill Hansen

Recognized as the leader of our hunting party, C.T. Chesser, at 63, has been involved with the taking of more buck deer than any other person I know. Next to him is Delbert Spence who, like me, is 15 years younger than C.T. Both of these men have an unusual understanding of woods and a talent for reading sign. Both are excellent marksmen, with perhaps Delbert's youth giving him the edge with a rifle. He is also very adept at moving rapidly through the woods on foot. The main thing about these friends of mine is their pleasant and persistent attitude toward everything they do. They are tough but also compassionate and understanding. Dedicated sportsmen with an abiding love for the outdoors, they are respected conservationists. We all share good natured fellowship when we hunt together, and that alone is reward enough for me, even if we don't see a deer all day. It seemed as if that Friday was going to be one of

(*Continued on next page*)

Photos By Philip Spann

By GENE WESLEY

Staying alert but quiet for extended periods is the toughest and least intriguing part of deer hunting with dogs, says author, shown at far left, on stand. Sight to stir a hunter's blood is fresh track of large deer, like the one above, imprinted in sandy soil. One of a buck's most used tricks is to mix and mingle with other deer, which makes it all the more difficult for dogs to stay on correct track.

(*Continued from preceding page*)

those fellowship-type days until C.T. found that big buck's track.

Usually we use one of two methods of hunting deer. Jumping and running is one method, using several dogs that will bark on track. We get the dogs started by putting them on a reasonably fresh track or by making a drive with them through areas offering thick cover for deer to bed down during daylight hours. The other method we use is slow trailing—using only one "cold-nosed" dog which has the ability and patience to smell each track a feeding animal made hours earlier, to the place he stopped. There is no better way to learn the habits of deer or to realize how clever and careful they are to avoid detection.

After roaming his habitat all night satisfying his appetite and perhaps fighting and chasing away other males encroaching on his territory, the buck will make sign, hooking bushes, scraping the ground, and relieving himself frequently before he starts getting ready for bed. It is at this point that an old stag demonstrates how wild and cunning he can be. For openers, he may walk in great circles, often making several figure eights. He then may run hard several yards only to turn around and walk back on that conspicuous track to a point of intersection before hopping off in another direction. After this, he may go for a swim if water is close, and then slip into dense cover near the water, or walk downwind some distance to cover on the crest of a nearby ridge for bedding down for the day. From this vantage point he can smell or hear any predator following his trail, long before it gets too close.

Following a dog trailing a feeding track is the most interesting way to hunt deer, but it takes stamina and endurance. You might walk several miles, taking most of a day, only to have the deer get up and quietly slip away when you unknowingly touched the treadle of one of his alarms. Occasionally, however, the man with the dog, or a flanker staying abreast a few yards to the side, will be able to see and get a shot off at a fleeing buck. This is essentially what had happened to C.T. and me that Friday afternoon.

We had put old Knotleg, C.T.'s moody-but-persistent slow trail dog, on the track. Although it was with some difficulty, he could and did trail the deer, even though the track was at least 12 hours old. Once in a while, on hard clean ground, he would raise his head to get the scent off leafy twigs or low bushes. Progressing slowly, he would look back occasionally to see if we were coming. At that point the track was so cold it wasn't necessary to put a string on the dog.

Presently, we came to a place where the buck had attacked several oak trees. He had literally wrung the tops out of these small oaks and hurled them several feet away. For about 50 yards, almost every tree down the trail was skinned or had hooking sign on it. Picking up a shredded oak branch, C.T. whispered hoarsely, "I don't know if our guns are big enough to kill a deer as mean as this one." I nodded in agreement as I motioned toward Knotleg, who was moving with renewed interest, his head held high, apparently winding his quarry in the direction of an old field grown up in high briars and dog fennel.

Photo By Philip Spann

C.T. broke into a run after the dog, while I hurried toward the corner of the field fence.

Hearing a ripping noise in the briars, I whirled in that direction only to see C.T. firing one shot at a brown flash clearing the web wire fence. After that, there was nothing. Quickly catching Knotleg and putting a string on him, we hurried to the place C.T. had last seen the deer.

"I saw his horns when he first got up," C.T. said excitedly, "but I never could see him again until he jumped this fence."

"Maybe you got into him," I said hopefully. "He could be right there in that briar patch." Knotleg now was straining at his string, pulling C.T. through the briars and vines the big buck had used to shield his escape.

Following a few yards behind them, I spotted a drop of blood. Some distance away, there were several more red specks on the white sand, at the ford on a branch where our deer had stopped momentarily to get his bearings and plan his next move.

"You tagged him, C.T.," I whispered, pointing my gun barrel at the blood on the sand, "but I'm afraid dark is going to catch us before we see that old boy again." We agreed our best chance then would be to turn some fast-running dogs on the track, but our trucks and dogs were at least a mile away, and it was nearly sundown. By the time we walked to our trucks and brought some dogs back to the track, it would be completely dark.

It seemed that our only hope to kill our buck was to quit for the night with the hope that the dog could trail the track the next morning. After marking the track and giving old Knotleg a deserving pat for a job well done, we started back to our trucks with a promise to be back the next morning regardless of conditions.

At that time, we still had not seen the track clearly enough to realize we were pursuing Old Crip.

Now it was Saturday morning, and the light of the gray, wet dawn allowed me to drive a little faster. C.T. and Delbert had already arrived at our marked track and had discovered that the dog could trail it. While we had been delayed by the inclement conditions, they had been planning our strategy. It had been decided that Delbert and his son-in-law, Jackie Hamilton, would go with the slow trail dog until they jumped the buck again. Then they would put some running dogs on him. Jody and I were to hold stands on two ridges south of the section the buck had entered. C.T. would stay close to his truck in order to head off the race should it not come toward us. Receiving this information over the radio, I took a short cut through a soybean field to the closest place to our stands that I could drive. Bouncing over the field road awakened Jody, who stretched and yawned as he frowned at the rain which was now peppering down steadily.

After parking the truck and putting on our rain gear, I placed Jody on his stand, reminding him to be still and quiet but to get back to the truck if it started lightning or raining very hard. Wishing him good luck, I sloshed off toward my stand, a half-mile away. Several days earlier, three bucks, running together, had crossed the ridge at that point only minutes before I had gotten there. I had been too late that day, but knowing that buck deer often use the same trails, I had catalogued that information, and today just might be the day it would pay off.

Staying alert while being still and quiet is hard for me, particularly when it's required for an extended time. To me, this is the most difficult and least interesting part of deer hunting. Compounding the problem today was the rain, which was leaking through my coat and wetting me thoroughly.

Hundreds of thoughts passed through my mind as I backed against a large pine and listened to the distant sounds of highway traffic and the lonely

(Continued on next page)

One of the most conspicuous signs of a buck's presence in an area are small trees with bark rubbed off by animal "feeling his oats." Hoping that the trail is not too old for hounds to follow, hunters point guns at deer tracks around such a rub, to encourage dogs. A cagey old buck, like the one in photo at right, has bag full of tricks, including walking through water to break the scent trail. The whitetail deer does not attain old age by being stupid.

Photo By Wallace Hughes

(*Continued from preceding page*)

barking of a house dog, mingled with the constant dripping of the rain on the leaves around me.

Glancing at my watch, I realized I had been on my stand for an hour and 50 minutes, and I had not heard one sound from our dogs or people. Had I been with less dedicated hunters, I might have thought I was the only one getting wet, but knowing my party, it never occurred to me to leave my stand until I was called away.

While I was maintaining my lonely vigil, Delbert and Jackie were slowly making progress, working Lou, the little blue-ticked beagle, on the buck's cold track.

Probably the most difficult thing in slow trailing is staying on the track of a particular deer in an area where there are other deer. One of the whitetail buck's most often-used tricks is to find some does to mingle with in order to switch possible pursuers to the more attractive smell of several deer moving together. Also, a "fresh" deer crossing an old track will invariably switch a dog to the hotter track. This is where the man has to help the dog, and such was the case this morning when Delbert had helped Lou through an intersection of a smaller deer track just before arriving at a bed where our buck had spent the first part of Friday night. It was there that the cold track warmed up, and Jackie was sent back to the truck to exchange Lou for three of Delbert's best running dogs, Slingshot, Jodie, and Shamey, a downcast-looking beagle with very sad eyes.

Once started on a track, these dogs will run all day and most of the night unless they are cut off and caught. It was no trouble getting them started this time, but they did encounter some difficulty right away, where the deer had decided to swim a large beaver pond.

Picking up the track on the opposite side of the pond, the dogs were trailing but not barking much on the track. They were about a half-mile north of me when I first heard Slingshot's coarse bark. Jolted back to reality, I was straining my ears for the next sound from the dogs. When it came, much clearer and closer, my nerves began to tighten and the tingle of excitement began to surge through me.

"They must have him up," I half whispered to myself as the dogs' barking was becoming more regular. Then I saw him! A brown shadow slipping easily through the planted pines 70 yards away, he was quartering toward me when he stopped at a fence behind a scrub oak thicket. My whole body was pressed motionless against the big pine tree.

He cleared the fence in a long, graceful leap, and I could easily see his high, broad antlers. He was a magnificent animal, now running hard toward a small clearing directly in front of me, about 35 yards away! My Browning 12 Magnum was at ready position, and when he reached the clearing, I drew down on his rib cage and squeezed the trigger.

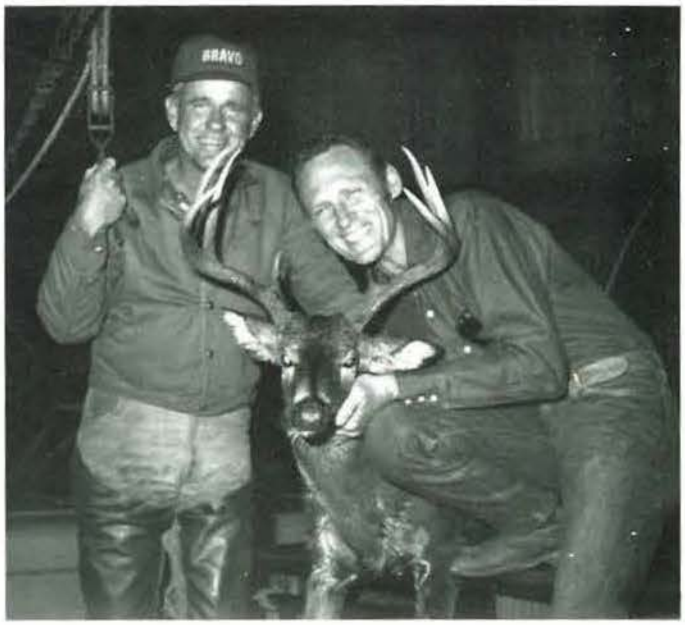


Photo By George Stephens

Old Crip brought to bag. The big buck, shown here with the author, left, and Delbert Spence, weighed 170 lbs. field dressed. Heavy-beamed antlers carried 6 points.

By the time I reached the dead buck, Delbert's dogs were there baying feverishly. Tying them to nearby trees, I field dressed my buck, and it was then I first noticed the crippled left hind leg. Passing that injury off as having been done by C.T.'s shot the afternoon before, it still did not occur to me that I had downed a particularly famous deer. This came when my companions arrived a short time later, when Delbert was examining the buck. Picking up the deer's hind leg, he exclaimed, "Gene, I believe you have killed Old Crip! This must be him! Look at this left foot!" I tried to explain that I thought that was C.T.'s shot sign, but close examination showed it was an old injury. It surely had to be the legendary crippled buck.

When we got him in to a scale, we found he weighed 170 pounds, field dressed. While he had only six points, his antlers were big, heavy-beamed, and bright.

It was pleasant to gather around the tailgate of the truck and toast the successful hunt. Any dyed-in-the-wool deer hunter will recognize this elation. But even as we basked in our good fortune, there was no denying the feeling that we'd lost something highly valued, too. We were also toasting the memory of Old Crip.

I think Delbert expressed a feeling we all shared at that moment when he said, "Boys, it's kind of sad to know that this will be Crip's last trip out of this bean field. He won't be making his mark here again."

There have been many other deer and many other stories. I hope there will be many more of both in the future. But there was something very special about this one, very special, indeed. ●

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